THE CANADIAN NURSE

UME 51 • NUMBER 7
MONTREAL

Highlight for
JULY 1955

ADVANCES IN
POLIO CONTROL

•

HITTING THE SILK

•

See pp. 516 & 539

THE CANADIAN NURSES' ASSOCIATION

New Morning Milk... Developed especially for Babies

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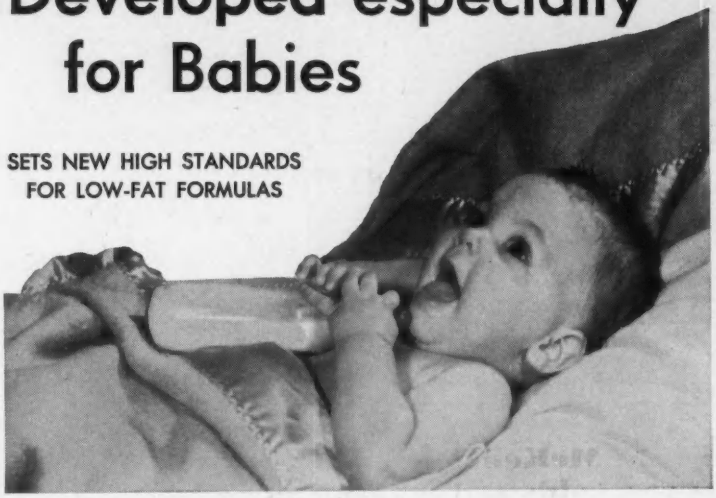

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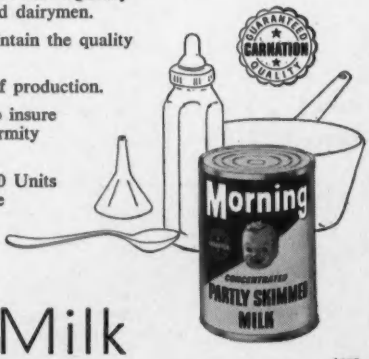

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Morning Milk

1025

THE CANADIAN NURSE

L'Infirmière Canadienne

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JULY 1955

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rich source of natural vitamin-B complex

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easy digestibility

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5 CEREALS • OVER 56 STRAINED AND JUNIOR FOODS INCLUDING MEATS

Between Ourselves

Do you remember the tremendous burst of newspaper publicity with which we were bombarded last spring when the report of the efficacy of ***Salk vaccine*** for the prevention of poliomyelitis was first released. There was scarcely a page in the newspaper we read that did not include some news item or picture. Subsequent events have moderated the initial enthusiasm somewhat, but the story of the progress that has been made in recent years is fascinating. **Dr. A. J. Rhodes** has been closely associated with many of the recent developments. You will enjoy reading about the step-by-step discoveries that led to the production of the much-talked-of vaccine. Still more discoveries are needed to provide a vaccine that will be "as nearly 100 per cent effective as possible."

* * *

Our very effective cover picture this month is of **F/O Marion Neily,** Middleton, N.S., who has the distinction of being the first R.C.A.F. nurse in Canada to make a jump, or in para-rescue parlance to "hit the silk."

Seven R.C.A.F. nursing sisters have received training so far at the R.C.A.F. Para Rescue School. The first seven weeks of the eighteen-week course are spent at Edmonton. There the students receive preparatory work before going on to Jasper, Alta., for parachute drops into open and bush territory, mountain and glacier climbing, and bush lore. Each graduate has made ten jumps during the training period, six into open country and four into heavily timbered areas.

Another branch of specialized training for R.C.A.F. nursing sisters is described for us by **F/L Gwen Somers.** There may not be quite the same degree of excitement in the life of a ***flight nurse*** as in her high leaping sister's but it is a most reassuring thing for wounded men to know that all of the highly qualified skills of a well trained nurse are available to him as he is lifted to safety and recovery.

* * *

Last year, an advertisement for a superintendent of nurses for the Manitoba School for Mentally Defective Persons appeared in our *Journal.* It did not bring a single, solitary nibble. Pondering on the reasons for this complete indifference among graduate nurses, both to the need and the opportunity provided, **Dr. H. S. Atkinson** has put his diagnostic skills to work and has come up with some pretty convincing arguments why registered nurses should not leave such an important position as was advertised to a qualified psychiatric nursing assistant. Is opportunity knocking at *your* door?

* * *

Announcement was made to all schools of nursing early last year that a ***cash award*** of $25 would be given by Macmillan Company of Canada for the two best articles on comprehensive nursing care written by student nurses in each calendar year. The judges selected by the Editorial Board of *The Canadian Nurse* were beset by seasonal complaints, one after the other, so that the actual evaluating was delayed. However, early in May, cheques and letters of congratulations were mailed to:

1. Miss Norma Joan Killeen, a 1956 B student at Royal Inland Hospital, Kamloops, B.C. Miss Killeen's article is published in this issue.
2. Miss Ann O'Rafferty, a student of Halifax Infirmary and Mount St. Vincent College, Halifax, N.S. Her article dealing with Acute Laryngotracheo Bronchitis would be more appropriate for winter publication than for August but to keep the sequence straight, we shall publish it next month.

Book prizes were awarded by Macmillan's to two other student nurses who also received first class rating (over 80 per cent). Their articles will follow in September and October. They are:

Miss Esme Baker of University of Alberta Hospital, Edmonton, Alta.

Miss Martha Harlow of Victoria General Hospital, Halifax, N.S.

We offer sincere congratulations to all four of these students. A number of twigs of the grape-vine have let us know that many more entries may be expected this year. Send them along, students nurses. Who knows? You may win $25 and who wouldn't like that?

A small girl wrote in an essay on "Parents" that "The trouble with parents is that when we get them they are so old, it's very hard to change their habits."

New Products

Edited by DEAN F. N. HUGHES

PUBLISHED THROUGH COURTESY OF *Canadian Pharmaceutical Journal*

ANTEPAR

Manufacturer—Burroughs Wellcome & Co. (Canada) Ltd., Montreal.

Description—Each scored tablet contains Piperazine citrate in an amount equivalent to 500 mg. piperazine hexahydrate.

Indications: For the eradication of pinworms and roundworms.

Administration—The tablets should be given for seven days, withheld for the next seven days, then given again for another seven days. Or given for fourteen consecutive days. Perianal application of an antipruritic ointment is helpful.

To prevent re-infestation, hygienic measures such as daily washing of the rectal opening and genitals, washing hands before meals, keeping finger nails short and well scrubbed are recommended.

Instruction leaflets for handing to patients may be had on application.

DORIDEN

Manufacturer—Ciba Company Ltd., Montreal.

Description—An oral, moderate or short acting, non-barbiturate sedative and hypnotic, with rapid onset of action, absence of excitation or morning hangover and minimal side effects. Doriden is a-ethyl-a-phenyl-glutarimide, (gluthethimide).

Indications—Insomnia; daytime sedation in anxiety-tension states (hypertension, menopause, coronary thrombosis, anxiety neuroses, hysteria, epilepsy, thyroid disease, etc.); pre-surgery sedation.

PLAX LOTION

Manufacturer—*Can. Dist.:* Fidelity Pharmaceutical Co., Toronto, Ont.

Description—Flesh-colored lotion containing: Salicylic acid 1%, ammoniated mercury 3%, with anthracene, phenanthrene, naphthalene, carbazole, picolene, quinoline, pyridine, cresol, phenol, zinc oxide, talc, propylene glycol, and water.

Indications—For palliative control of psoriasis.

Administration—Thoroughly cleanse and dry the scaly area. Apply a thin film of lotion, blend gently into the patches. Do not apply more than once a day and only to localized lesions—not to extensive patches except under close supervision of the physician.

MIO-PRESSIN NO. 1 CAPSULES (HALF STRENGTH)
MIO PRESSIN NO. 2 CAPSULES (STANDARD STRENGTH)

Manufacturer—Smith Kline & French Inter-American Corporation, Montreal.

Description—Each capsule contains:	No. 1	No. 2
Rauwolfia serpentina (whole root)	12.5 mg.*	25 mg.*
Protoveratrine 0.1 mg.	0.1 mg.	0.2 mg.
'Dibenzyline' (phenoxybenzamine hydrochloride)	2.5 mg.	5 mg.

*Equivalents (biologically assayed)

Indications—Mild, moderate, and severe hypertension.

Administration—In mild and moderate hypertension, the initial dose should usually be 1 capsule (No. 1) three or four times a day. Severe cases may be started on the same number of (No. 2) capsules. This initial dose should be maintained for at least two weeks. If the desired effect has not been achieved in this time, the daily dose may be increased by two or three capsules at weekly intervals until the response is satisfactory.

NATA-VITE

Manufacturer—Ingram & Bell Limited, Toronto.

Description—A red sugar-coated tablet containing: Bone meal 5 gr., ferrous gluconate 3 gr., vitamin A 1500 I.U., vitamin D 500 I.U., vitamin C 25 mgm., thiamin mononitrate 2 mgm., riboflavin 2 mgm., niacinamide 5 mgm., sodium iodide 0.2 mgm., pyridoxine HCl 3.3 mgm.

Indications—As a dietary supplement, particularly indicated during pregnancy and lactation. Contains a full vitamin B_6 requirement for protection against toxemias of pregnancy.

Administration—One tablet, three times daily.

TRILOMBRINE

Manufacturer—*Can. Dist.:* Fidelity Pharmaceutical Co., Toronto, Ont.

Description—Each tablet contains 750 mg. of a-ethyl-b-(2, 4, 6-triiodo-3-hydroxyphenyl) propionic acid.

Indications—For oral cholecystography.

The Journal *presents pharmaceuticals for information. Nurses understand that only a physician may prescribe.*

ANAFER

Manufacturer—The British Drug Houses (Canada) Limited, Toronto, Ont.

Description—Each sugar-coated tablet contains: Ferrous sulphate, exsiccated 200 mg. (equivalent to ferrous sulphate B.P. 4.3 gr.), ascorbic acid 10 mg., menadione as the diacetyl derivative 1.5 mg.

Indications—The treatment and prevention of iron-deficiency anemias. Clinical trials have shown that ferrous sulphate when combined with vitamins C and K is well tolerated even when there has previously been severe gastrointestinal upset with other iron preparations.

Administration—Orally, Children — one tablet once or twice daily. Adults — one tablet three times daily or as directed by the physician.

VITASOL-M

Manufacturer—Frank W. Horner Limited, Montreal.

Description—Each capsule contains: Vitamin A 10,000 I.U., vitamin D 2,000 I.U., vitamin B_{12} (amorphous) 3 mcg., thiamine 3 mg., riboflavin 1 mg., pyridoxine 1 mg., niacinamide 10 mg., ascorbic acid 25 mg., calcium (as powdered bone meal) 33 mg., phosphorous (as powdered bone meal) 15 mg., iron as ferrous sulfate 20 mg., zinc as zinc sulfate 1 mg., copper as copper sulfate 1 mg., magnesium as magnesium sulfate 1 mg., manganese as manganese sulfate 1 mg., potassium as potassium chloride 1 mg., cobalt as cobalt sulfate 0.1 mg., boron as sodium borate 0.1 mg., iodine as potassium iodide 0.1 mg., fluorine as calcium fluoride 0.015 mg., molybdenum as sodium molybdate 0.2 mg.

Indications—Whenever intensive vitamin-mineral supplementation is required.

Administration—One capsule daily, or as required.

ZIRADRYL CREAM

Manufacturer—Parke, Davis & Company, Ltd., Walkerville, Ontario.

Description—Combines 4 per cent of zirconium oxide (as zirconium carbonate) with 2 per cent of benadryl hydrochloride, in a water-miscible base.

Indications—For prevention of, or treatment of, rhus dermatitis resulting from contact with poison ivy or poison oak. It may be applied to exposed surface of the body before anticipated contact; used immediately after known contact; or applied after dermatitis appears.

The Journal *presents pharmaceuticals for information. Nurses understand that only a physician may prescribe.*

Flower Names

Traced to their sources, names of many flowers show how keenly they were observed by early growers. Here are a few examples: An ancient blossom tormented the nose of those who sniffed it, so from *nasus* (nose) and *torqueo* (twist), the nose twister was called *nasturtium.* Another flower was made up of spikes somewhat like the short Roman swords carried by gladiators. From the name of the sword, *gladius,* the plant was termed *gladiolus.* French gardeners noticed that the expanded blossom of a little flower resembled a *tulipan* (turban). So they called it *tulip.* Linnaeus — famous botanist — observed that the seed capsule of a familiar flower is shaped like a cup, or miniature water pitcher. Delving into Greek, he combined *hydr* (water) and *angos* (vessel) to coin the name *hydrangea.* Because a type of three-colored violet had a thoughtful expression on its face, early French botanists called it *pensée* (thoughful). No other common flower has had so many names. At various times, it has been known as love-in-idleness, kiss-me-at-the-garden-gate, three-faces-under-a-hood, and hearts-ease. How these names originated, no one knows. They were popular for many years, but eventually the French name was adapted as *pansy.* In time, it won over all contenders as a designation for the flower with a pensive countenance.

—Webb B. Garrison

Aqueous penicillin should be given slowly to avoid sudden spreading apart of muscle bundles. (Two cc. given rapidly through a No. 23 needle attains the velocity of a .22 bullet!) When removing the needle, withdraw it very rapidly. If oozing of material occurs, gently massage the immediate area with an alcohol fluff.—D. Earl Hunt, M.D.

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and

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Outpost Nursing Stations, Health Centres and field positions in Provinces, Eastern Arctic, and North-West Territories.

SALARIES

(1) Public Health Staff Nurses: up to $3,300 per year depending upon qualifications and location.

(2) Hospital Staff Nurses: up to $3,120 per year depending upon qualifications and location.

(3) Nursing Assistants or Practical Nurses: up to $185 per month, depending upon qualifications.

• Room and board in hospitals — $30 per month. Statutory holidays. Three weeks' annual leave with pay. Generous sick leave credits. Hospital-medical and superannuation plans available. Assistance may be provided to help cover cost of transportation.

• Special compensatory leave for those posted to isolated areas.

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(1) 422 Federal Building, Vancouver, 2, B.C.;
(2) Charles Camsell Indian Hospital, Edmonton, Alberta;
(3) 10 Travellers Building, Regina, Sask.;
(4) 522 Dominion Public Building, Winnipeg, Manitoba;
(5) Box 292, North Bay, Ontario;
(6) 55 "B" St. Joseph Street, Quebec, P.Q.;
(7) Moose Factory Indian Hospital, Moosonee, Ontario.

or

Chief, Personnel Division,
Department of National Health and Welfare,
Ottawa, Ontario.

THE CANADIAN NURSE

L'Infirmière Canadienne

A MONTHLY JOURNAL FOR THE NURSES OF CANADA
PUBLISHED BY THE CANADIAN NURSES' ASSOCIATION

VOLUME 51 NUMBER 7

MONTREAL, JULY, 1955

Begin Planning Now

ONE YEAR FROM NOW the 1956 biennial meeting of the Canadian Nurses' Association will be a matter of historical interest. Delegates will have mailed home all of the reports, samples, literature and so forth, and be busy with their kodaks recording scenic beauty spots they visit on one or another of the fascinating post-convention tours that are being planned. Your editor will be hard put to get the story of the convention written in time to be published in the August issue — it may have to be held over until September because of this business of deadlines! That will be 1956!

What of the intervening months? There is no absorbing topic for group and individual study as there was in the previous biennium when consideration was being given to the sweeping changes in our association's structure. Most of the provincial associations have already attended to the matter of altering their committee structure to conform to the new pattern adopted at Banff in 1954. Is there any pre-convention thinking and planning, therefore, that nurses should be doing during the coming months as preparation for the 1956 convention? What will be discussed at the meetings in Winnipeg?

It is too early yet to make any prediction or announcements regarding the program. However, the theme of the convention has been decided upon — "Nursing Serves the Nation." Both those engaged in the many different branches of nursing service and those interested primarily in nursing education will find stimulus in analyzing their own endeavors. How does the contribution of each nurse in her own sphere add up to "serving the nation"?

There is another side to the preparation that also needs to receive some consideration well ahead of time. Those who will receive financial assistance from one or another of the nursing associations may stop reading here! The rest will be interested to know what the probable convention costs will be so that the necessary amount can be added to the sum required for the fare and any post-convention tripping. Here are some interesting straws in the wind:

This is the third time a University campus has served as our convention locale — Mount Alison at Sackville, N.B., in 1948; University of British

Columbia at Vancouver, B.C., in 1950; University of Manitoba at Winnipeg, Man., in 1956.

Residence accommodation on the campus will be available for 550 nurses. As this will be the most economical place to stay, as well as being good fun for all, watch for the pre-registration forms that will be published next October. Get your registration in early.

Do you prefer the comforts of a hotel? Fifty double rooms are being reserved for this week at both the Royal Alexandra and the Fort Garry Hotels. Those who plan to drive to Winnipeg may want to stay at one of the new motels that are not too far from the campus. Be an early bird!

The all-important question of "where do we eat" is being arranged well in advance. The campus dining room will hold 450 persons at a sitting. In addition, for those who desire a light snack, there will be room for from 200 to 250 in the canteen.

From now on there will be many articles and much information appearing in the various issues of the *Journal*. Watch for all of the exciting events that are being planned. But most important of all, begin your own planning now so that you won't be disappointed when June 25, 1956, rolls around. Winnipeg in 1956!

Our Kind of Democracy

We know that our democratic system is not perfect. We know that is permits injustices and wrongs. But with our whole hearts we believe in its continuous power of self-remedy. That power is not a theory — it has been proven. Through the years democracy has given more people freedom, less persecution, and a higher standard of living than any other system we know. Under it, evils have been abolished, injustices remedied, old wounds healed, not by terror and revolution but by the slow revolution of consent in the minds of all the people. While we maintain democracy, we maintain the greatest power a people can possess — the power of gradual, efficient, and lawful change.

Most of all, we believe in democracy itself — in its past, its present, and its future — in democracy as a political system to live by — in democracy as the great hope in the minds of the free. We believe it so deeply rooted in the earth of this country that neither assault from without nor dissension from within can ever wipe it entirely from the earth. But, because it was established for us by the free-minded and the daring, it is our duty now, in danger as in security to uphold and sustain it with all that we have and are. We believe that its future shall and must be even greater than its past. And to the future — as to the past of our forebears and the present of our hard-won freedom — we pledge all we have to give.

— Stephen Vincent Benet

Crashing the Age Barrier

As aeroplanes approach the speed of sound they hit the "sound barrier." Travel within this range of speeds is stormy; the planes rock and shake, buffeted by air vibrations. At higher velocities, however, smooth flight is again possible.

Recent studies indicate that the "sound barrier" has its counterpart in the human body. According to one researcher, our bodies reach an "age barrier" when we get to be 60 years old. Between 60 and 75, the physician declares, many of the body's gradual aging processes cease; the breakdown of certain tissues and organs stops, and is actually supplanted by a period of renewed growth. Most of us die before reaching this "age barrier," or while we are going through it. But if we manage to survive it, the physician notes, there is smooth sailing ahead — the chances of living to 100 are good.

— ISPS

Safety Note: The car to watch is the car behind the car in front of you.

Recent Advances in Poliomyelitis and Other Virus Diseases

A. J. Rhodes, M.D., F.R.C.P. *(Edin.)*

With the increasing control of bacterial infections by means of antibiotics, virus diseases are assuming a more and more important place in medical and nursing practice.

Some of the virus diseases with which you are familiar rank among the most important human illnesses: the common cold, influenza, virus pneumonia, herpes, measles, German measles, chickenpox, smallpox, poliomyelitis, mumps, hydrophobia, virus meningitis, encephalitis, tropical diseases such as yellow and dengue fevers, trachoma, and the whole group of typhus and typhus-like rickettsial diseases.

The casual agents of virus diseases differ considerably from bacteria, and have to be studied by special techniques. For example, viruses are smaller than bacteria and cannot be seen properly with the ordinary microscope. Furthermore, they are much more difficult to cultivate than bacteria in the laboratory, and will not grow in broth, on agar or similar media, for they require living cells for their growth.

Of recent years, considerable improvement has been made in the methods of studying viruses. Thus, it is now possible to demonstrate many viruses with the electron microscope, and with newer techniques of tissue culture it is possible to grow, in the laboratory, many viruses that previously could not be cultivated. These new techniques have led to the demonstration that many diseases thought to be of unknown cause, are in fact virus diseases, and have led to the accumulation of more detailed knowledge about many of the old-established virus infections.

For example, within the last few years, many new viruses have been discovered. One of the most interesting of these is Coxsackie virus. This virus causes an ulcerative pharyngitis known as herpangina, also aseptic meningitis, and epidemic myalgia or epidemic pleurodynia.

Quite recently, a new group of viruses has been discovered by workers in Washington, D.C., and some members of this group seem to cause "colds." It is hoped that, at last, some progress will be made in the study and perhaps eventual prevention of some types of common cold.

Here, I shall confine my remarks to recent advances in the study of poliomyelitis, advances that have been made possible by the introduction of suitable techniques for growing the virus in the laboratory.

Introduction

Poliomyelitis is perhaps more feared than any other infection of childhood because of the permanent crippling and disability that may result. It is not, however, a very common disease, and it has been estimated by Dr. Henry Kumm of the National Foundation for Infantile Paralysis that, in the State of New York, only about 1 in every 200 children contracts the disease by the age of 20 and only 1 in every 1,900 dies from polio by the same age.

Although the disease is evidently not nearly as frequent as measels, influenza or mumps, it appears to be on the increase, not only in Canada and the United States where there have been epidemics for many years, but in those parts of the world where polio was previously almost unknown.

Dr. Rhodes is director, The Research Institute, The Hospital for Sick Children, Toronto. This paper was presented at the annual meeting of the Registered Nurses' Association of Ontario last April.

The customary public health measures for control, such as isolation of the case, and quarantine of contacts, have been of little avail in halting the spread of polio. Fortunately, two products for immunization have been developed; gamma globulin and, more recently, poliomyelitis vaccine.

The recent introduction by Dr. Jonas Salk and his collaborators of a tissue culture vaccine represents the fruits of nearly 50 years of toil by many workers in many countries. I shall try and tell you something of the major discoveries that have led to the present situation. We probably have not yet reached the end of the search for the perfect answer to polio, but how many more milestones there may be along the road, I cannot guess.

Discovery Number 1

Nearly 50 years ago, in 1908, Landsteiner and Popper demonstrated the virus etiology of polio, and showed that the infection could be transmitted to monkeys. For about 30 years, inoculation of monkeys remained the only means of demonstrating the presence of polio virus.

These animals were expensive, and work was carried out in only a few centres well-equipped with financial and material resources. Nevertheless, it is indeed suprising how much was learned about poliomyelitis during this "monkey era." The basic facts of immunity were established, but progress in the development of a practical vaccine was seriously restricted by the lack of a simple means of growing the virus.

Discovery Number 2

In the early 1930's, Kolmer and Brodie showed that monkeys could be immunized against polio by means of vaccines. These vaccines were suspensions of central nervous tissue of monkeys infected with polio virus. The suspensions were treated with chemicals, such as formalin.

This work actually reached such an advanced stage that several thousand children were inoculated with an experimental vaccine. Unfortunately, a few cases of paralysis developed following the inoculation with these vaccines, and no further experiments were carried out. The hands of the clock were kept back for 20 years by this experience, and progress awaited the finding of some other source of virus than nervous tissue of monkeys.

Discovery Number 3

In 1939, Armstrong reported that one particular strain of polio virus, known as the Lansing, could be transmitted to cotton rats and mice. This immediately made it much easier to study polio, for mice are cheap and can be obtained in large numbers. However, the Lansing strain is the least common of the three types of polio virus, and the other types do not infect mice.

Discovery Number 4

Working with Lansing polio virus, Morgan and her associates in Baltimore demonstrated the important part played by serum antibody in the prevention of polio. She showed that monkeys inoculated with virus in the muscles resisted a subsequent injection of virus into the brain, provided that a high level of antibody had developed in their blood. The degree of immunity in these vaccinated animals was directly related to the amount of antibody circulating in the blood. If the level was low, the vaccinated animals became paralyzed when they were injected with virus into the brain; if it was high, they resisted.

These studies demonstrated convincingly that blood antibody that has the property of neutralizing and destroying polio virus plays a major role in determining resistance.

Discovery Number 5

It had been suspected for some time that polio strains were not all alike and varied in their antigenic structure. The National Foundation for Infantile Paralysis, in the days when monkeys were still required for such experiments, organized a cooperative study in a number of laboratories in the United States.

Over 200 strains of polio virus

isolated from various parts of the world, including our own laboratories in Toronto, were studied by special methods. It was found that these strains fell into three antigenic types which we know as polio virus, Type 1, Type 2, and Type 3.

Type 1 was much the commonest. These types have quite distinct viruses and infection with one type will not give rise to resistance to infection with the other types. Polio virus types causing poliomyelitis in Canada belong in over 90 per cent of instances to Type 1. It is evident that any vaccine against polio must contain all three types of virus.

Discovery Number 6

Early in 1949, Doctors Enders, Weller, and Robbins of the Harvard Medical School, Boston, reported their fundamental discovery that polio virus could be grown in cultures of human embryonic tissue in small flasks or test tubes and that it eventually destroyed the tissue. This so-called "cytopathogenic effect" could be seen with the microscope.

Techniques were rapidly improved and it was found that monkey kidney was the most suitable tissue for the growth of virus. Arising out of this discovery has come, not only a simple method for the diagnosis of polio by isolation of virus in tissue cultures, but a method for the mass production of polio virus for incorporation into a vaccine.

No longer is it necessary to inoculate live monkeys in order to study the virus. However, monkeys are needed in larger numbers than ever before, as sources of kidney tissue for cultures. Whereas before, one monkey could be used in a single test only, now one monkey's kidneys provide cultures for one hundred or more tests.

Discovery Number 7

This particular discovery was made in Toronto, where Doctors Morgan, Morton and Parker of the Connaught Medical Research Laboratories had been working for some years on the development of synthetic chemical medium rich enough to support the growth of tissue cells in test tubes and outside the animal body.

Their original work had no particular application to polio, for it was part of a cancer research program. In 1950 they described a medium which they called "Mixture No. 199" as being suitable for the growth of chick embryo cells in tissue culture. This medium was prepared from a large number of chemicals and did not contain any organic material such as horse serum that had been customarily used in tissue culture work.

Early in 1952, working in the Virus Research Department of The Hospital for Sick Children, Toronto, my associates, Doctors Franklin and Wood with Miss Thicke and Mrs. Duncan reported that this Medium 199 could be used to grow polio virus in tissue cultures. The new medium had several advantages over media used hitherto. In particular, it appeared to us that it would be useful in the development of a vaccine, since it did not contain any horse or other animal serum that might cause allergic reactions on injections in children.

In 1953, at the specific request of the National Foundation for Infantile Paralysis, Doctors Leone Farrell and Wood and others in the Connaught group developed a method for the mass production of polio viruses of all three types in tissue cultures of monkey kidney nourished with Medium 199.

In this method, three-quarters of a liter of polio-infected fluid was obtained from each tissue culture bottle. Previously, only a few cubic centimetres had been obtained from each culture.

Under the active direction of Dr. R. D. Defries, the staff of the Connaught Medical Research Laboratories, during the rest of 1953 and early 1954, prepared large amounts of virus that were shipped to commercial firms in the United States and there processed into the "Salk vaccine" used in the trial carried out in the United States and Canada in the spring of 1954. This involved the addition of formalin to kill virus. This vaccine was subjected to exhaustive tests of safety to make certain that no live virus remained.

Discovery Number 8

It had been known for some years than an inoculation of polio antibody will protect animals against a subsequent injection of live polio virus. Polio antibody can be administered to experimental animals in the form of convalescent monkey serum or more suitably in the form of human gamma globulin. This product contains antibody to the three types of virus because the blood of most adults contains antibody as a result of a previous mild or subclinical infection.

In 1951 and 1952 Dr. Hammon of the University of Pittsburgh carried out a large scale trial of gamma globulin as a preventive of polio in man. He found that it did, indeed prevent some cases. The effect was, however, short-lived and did not come into operation for approximately one week following inoculation.

One of the interesting findings was that although relatively low levels of antibody were produced in the blood of the inoculated children, these levels were sufficient to protect against polio. This study confirmed the important protective role of antibody but indicated that some more practical way of producing it would have to be found.

Discovery Number 9

About 1952, Dr. Jonas Salk, Pittsburgh, started to develop a vaccine consisting of killed polio virus and he worked out a method of treating polio-infected tissue culture fluid with formalin so that the virus was killed, yet at the same time retained antigenic properties. He demonstrated that injection of this material stimulates the production of antibody in monkeys and in man and that these antibody levels remain raised for an appreciable period.

He carried out his experiments at first on a fairly small scale in human beings in the Pittsburgh area and later was the driving force in organizing the large scale trial carried out in 1954 with the support of the National Foundation for Infantile Paralysis.

Discovery Number 10

During the last few years virus workers have been studying the methods whereby polio virus spreads throughout the human body and there have been two alternate theories.

One school maintained that polio virus is "neurotropic," that is to say that it enters the body through the mouth, passes through the mucosal surface of pharynx or intestine and then spreads to the brain or spinal cord along nerve fibres. The second school maintained that there is a stage of viremia early in polio infection in which virus circulates in the blood. The great majority of workers supported, until recently, the first or neurotropic theory for which there seemed to be adequate proof from experimental work in monkeys.

The results of experiments by Horstmann and Bodian on chimpanzees and monkeys have caused most workers, however, to revise their opinion. It has been shown conclusively that when these animals are fed virus by mouth, virus appears in the blood and circulates for a few days.

Tests carried out in human cases of polio confirmed that viremia occurs in man also. Accordingly, Bodian and Horstman have postulated that in human polio, virus first proliferates in the wall of the intestine, then enters the blood and finally settles down in the central nervous system. Here it may cause a localized non-paralytic type of disease or may spread more widely and cause paralytic disease.

During the phase of viremia, virus is exposed to attack by antibody circulating in the blood stream and is thereby neutralized and destroyed. Clearly, inoculation of Salk-type vaccine is the obvious method of producing this antibody in those who are susceptible to polio, chiefly children.

The 1954 Trial

Against the background of these discoveries, the National Foundation for Infantile Paralysis staged, in 1954, a large scale trial of the vaccine elaborated and pioneered by Dr. Salk.

This was carried out in the United States, three provinces and Finland. Dr. T. Francis, Jr., Ann Arbor, Michigan, was entrusted with the colossal task of evaluating the results of this vaccination program that included nearly 2,000,000 children. Some 400,000 received the vaccine, the others being "controls."

In his report recently issued, Dr. Francis concluded that the Salk vaccine was very effective in reducing the incidence of polio. He stated that the reduction in incidence in vaccinated children was approximately 80 per cent. That is to say, the number of cases in vaccinated children was reduced to one-fifth of that in unvaccinated children.

Of particular interest is a comparison of the follow-up of a group of children who received vaccine and a group who received medium alone, thus serving as controls. When consideration is given only to patients in whom laboratory tests confirmed the clinical diagnosis during the six months after vaccination, eight cases of spinal poliomyelitis occurred in 200,000 vaccinated children, whereas 45 cases occurred among a similar number of controls who received the medium only (Table 1).

The vaccine proved absolutely safe and there were very few reactions attributable to the injection.

1955 and Beyond

Elaborate plans are now under way in this country and the United States to produce as much Salk-type vaccine as quickly as possible and to inoculate at first those who are at greatest risk: children in kindergarten and Grades 1, 2, 3, and 4.

The Ontario Government will provide vaccine made in the Connaught Medical Research Laboratories to inoculate all school children free-of-charge. It is hoped to complete this program before too long but it will take many months before it can be achieved.

All vaccine made in the Connaught Medical Research Laboratories is given rigorous safety tests, both in Toronto and Ottawa.

In the original trial, vaccine was given in three doses but now, following recent work by Dr. Salk, it is believed that two at intervals of 2-4 weeks will be adequate for the first course, a booster being given not less than seven months later.

The future status of polio vaccination is not yet certain. The vaccine must be improved to make it as nearly 100 per cent effective as possible. It is not known how long the resistance conferred by the present vaccine will last, although it is hoped that it will be of some duration. If the protection proves to be short-lived, it may be necessary to look for an alternate type of vaccine. Such a vaccine would be one containing modified virus which would give a mild infection yet immunize permanently against the disease. Such a modified polio virus

Table I

Evaluation of Salk-type Polio Vaccine by Dr. T. Francis, Jr.:
Results in Laboratory Confirmed Cases in Control Areas

Inoculated Population	Inoculum (3 shots)	Number of cases of polio:	
		Spinal	Bulbar
200,745	Vaccine	8	2
201,229	Medium 199	45	23
percentage effectiveness of vaccine		82%	91%

would be analogous to vaccinia virus which prevents smallpox.

Whatever the future holds in store, today we can say that the introduction of the Salk-type formalin-treated vaccine is a major step forward in the eradication of poliomyelitis and that the future seems to be full of promise.

Adjustive Mechanisms

JEAN W. SPALDING

A KNOWLEDGE OF THE ADJUSTIVE mechanisms should be of value to anyone engaged in the profession of nursing. It should assist the instructor who is helping nursing students to understand these mechanisms and thus supply them with some of the tools that will result in developing a greater awareness of the patient as a person. Such knowledge will provide a foundation that will enable the teacher to have a better understanding of the student as a person. This does not suggest that one hopes to perform in the role of a psychoanalyst. A nurse utilizes this knowledge to help her understand some of the complexities of human beings and to recognize developing maladjustments early, so that those qualified to deal adequately with such problems can be brought in for consultation.

The body maintains itself by the process termed homeostasis. Likewise the psychological integrity of the individual is safeguarded by adjustive mechanisms over which one has little control.[2] Adjustive mechanisms, also called defense mechanisms or dynamisms of defense, are auto-corrective devices which all individuals utilize to protect themselves against excessive tensional states and to maintain their self-esteem. Everyone encounters emotional states that form a direct barrier in achieving satisfaction. In such instances the individual behaves defensively instead of directly because uncomfortable tension must be released. The use of one of the mechanisms brings about a certain degree of temporary satisfaction.[1]

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> Dynamisms are the dynamic processes which psychoanalysts believe mediate between the Id and the permissions of the Ego and Superego; they are the unconscious or auto-corrective means by which the Ego avoids capitulation and maintains itself in the face of socially unacceptable desires and deviations in conduct.[3]

Because all persons experience tensional states and almost none has abilities or qualities that permit a successful direct attack on *all* problems, adjustive mechanisms are normal and necessary in the life of every individual.

> Defense mechanisms are not deliberately acquired by the person who displays them. They are for the most part unconscious. In a process of trial and error he discovers some responses that reduce his tensions and afford relief. These mechanisms tend to be repeated and perpetuated and do not involve deliberation or consciousness.[4]

It is only when an individual, in reacting to tensional states over a period of time relies extensively on the adjustive mechanisms for support of his Ego that he shows evidence of maladjustment.

There appears to be an almost unlimited number of classifications of the adjustive mechanisms. While the classification of the mechanisms is not important a better understanding of their function is since more than one mechanism may be involved in the behavior pattern of an individual. However the systematized organization of this paper lends itself to the adoption of a classification. Kaplan and Baron's classification which is based on the individual's quest for satisfaction and comfort will be used.

1. *Mechanisms of Deception:* Some

mechanisms tend to alter the individual's perception of a tensional situation by reconstructing his attitudes and feelings so that he senses no threat to himself. Included are the mechanisms of rationalization, projection, displacement, repression and suppression.

2. *Mechanisms of Substitution:* Some mechanisms attempt to change the tensional situation by substituting attainable goals for non-attainable or threat-reducing goals. The mechanisms of compensation, substitution, reaction-formation, sublimation and egocentricism are classified in this group.

3. *Mechanisms of Avoidance:* Some mechanisms enable the individual to employ psychological escape techniques whereby he attains temporary emotional comfort by removing himself from a threatening situation. The mechanisms of fantasy, negativism, motor hysteria and identification are included in this category.[4]

Mechanisms of Deception

Rationalization: Shaffer states that irrationalization would be a better term.[6] This mechanism protects the Ego because it provides plausible reasons for behavior, rather than acknowledging the true reasons which the individual regards as inferior or blameworthy. This self-justification removes feelings of guilt and anxiety, and he avoids the discomfort accompanying such feelings. The use of this mechanism provides comfort that becomes an automatic habit, protecting him when threats occur. There is an element of rationalization in each of the following features: (a) When we blame circumstances or people for our shortcomings and failures; (b) in procrastination, and (c) when we perform acts that are not socially accceptable "because others do it" and thereby justify our actions. The following illustrates this process:

> Miss Green entered the school for nurses with an excellent academic record. At first, her theoretical and practical results were on a par with her former achievement. Then her work began to show a marked decline. When this necessitated an interview with the director of education, Miss Green stated that she was interested in nursing, but that her associates made so much noise in the residence at night she could not study. She also indicated that her instructors failed to give her the assistance she required. Investigation into this situation revealed that Miss Green didn't try to study within the residence environment, because she left it during her off duty time, and that she had not approached any instructor to request assistance. As Miss Green was demonstrating no effort to correct this problem, she was referred to the hospital psychiatrist. With the psychiatrist's help she was able to see how her use of rationalization was increasing the problem for her and took steps to make the necessary adjustments in her behavior pattern.

Persons using rationalization are quite unconscious that they are distorting facts and that explanations are fabricated to protect their self-esteem. Rationalization must not be held in contempt as a mechanism of adjustment.

> Rationalization of one's behavior is no less an act of organic defense against disturbance than is a change of white blood count against infectious disease.[2]

Overuse of rationalization may remove a person from reality to the point that he finds himself in a real crisis. In its exaggerated form, rationalization is manifested as delusions which characterize severe personality disorders.[4]

Projection: This is an ego-preserving mechanism. It is the tendency to place responsibility for one's acts or thoughts on circumstances or persons beyond one's control. The individual remains guiltless because he can't be responsible for what happened. It is a universal tendency of both children and adults. These individuals are unaware that they are making themselves comfortable by removing self-guilt from conscious recognition. In her lectures Dr. Driscoll described three types of projection.

> The basis of gossip is projection. In gossip one transfers to another person, elements of one's own personality which one doesn't like. For example, when a group of adults gossip about the evils

of the younger generation, they are essentially revealing the things they would like to do but haven't the nerve to do. The realization of this is something that should be conscientiously investigated by nurses.

The transfer of thoughts, feelings and wishes toward some person or toward a more distant object, is evident in a person who has had harsh parents and cannot accept the concept of love.

The projection of one's unfulfilled desires and wishes onto another person. This is encountered when a parent unknowingly, and in good faith, projects his or her professional aspirations onto a son or daughter who is unsuited for that profession. It is evident in the nursing profession, when a student enters training because of the projection of her mother. When it occurs, it often results in failure or in some degree of inadequacy on the part of the person concerned. In the educational field, teachers should be fully aware that what they may term "direction of a student," may be the use of the mechanism of projection.[1]

Displacement: A special form of projection is known as displacement. This is the technique of shifting a response or reaction from the original object to another which is less dangerous.

In displacement the feelings are unrecognized until one becomes aggravated beyond control and then literally blows up. Many of the fears and dislikes in childhood and adulthood can be traced to the process of displacement. The object of the aware observer is to try to determine on what the fear or dislike has been placed. As this mechanism operates on the unconscious level, one cannot offer adequate reasons for these actions. In the student-teacher relationship, displacement may account for the teacher upbraiding the class and the student disliking the teacher. The following incident will illustrate the use of this mechanism.

Dr. Smith had a student in her class who violently disagreed with the contents of her lectures after each class. Dr. Smith called her in to talk the problem over. Eventually the student admitted she could listen to her if she didn't have to look at her. It turned out that this student's brother had married a girl who strongly resembled Dr. Smith. The student had no one to take the place her brother had formerly held in her life and developed a strong resentment towards his wife, which she could not express. The solution was temporarily solved by Dr. Smith placing this student with another professor.

Repression and Suppression: Repression is an unconscious process whereby guilt-producing thoughts and actions, unhappy experiences and unpleasant tasks are removed from awareness. Suppression is deliberate conscious control that keeps hazardous and undesirable impulses in check, perhaps holding them privately while denying them publicly. An individual is aware of a suppressed impulse. Over a period of time, these suppressed reactions take their place in the unconscious mind with the products of repression. Repression appears to be concerned with the manner in which the Ego and Superego deal with the impulses of the Id.[4]

Freud distinguished between primary and secondary repression. Primary refers to the denial of facts, that, if brought to awareness, would cause suffering through guilt or other negative self-feelings. Secondary refers to the tendency to avoid situations that might serve as reminders of the facts that led to the primary repression. Cases of amnesia can often be explained on the basis of secondary repression.[3]

The mechanisms of repression and suppression have a useful purpose in our adjustment to the anxieties encountered in living. We would find it very difficult to adjust if all disturbing memories and socially prohibited wishes were permitted to remain in the realm of consciousness. However, it is wise to realize that persistent use of these mechanisms will result in the disorganization of behavior.

Emotional patterns forced out of the conscious realm have their emotional forces retained in the unconscious where they continue to exert pressure for release. This pressure may find outlets through various symptoms of tension such as tics, chronic anxiety states or nervousness. Another undesirable aspect

is the energy it takes to prevent repressed emotions and experiences from gaining admission to consciousness. If most of his energy is used in inner struggles then little is left for living and the person becomes emotionally impoverished. He suffers from chronic fatigue and lacks spontaneity and initiative.[4]

It may assist nurses to understand some features of neurotic personalities if they realize that such conditions do occur when no mechanism operates to cut off past threats and apprehensions of the future, so that the individual can live in the present. Some neurotics become so overwhelmed by their guilt of the past, that they brood over it, neglecting to participate in the present, whereas others become so concerned about future problems that they fail to be aware of the present.

Mechanism of Substitution

Compensation: This is a mechanism that atones for reality. Compensatory behavior enhances the self-esteem by overcoming a failure or deficiency in one area through the development of personal qualities or skills where success is possible. It is used to cover up weakness, to counterbalance failure, or to achieve prestige. The degree to which an individual uses this mechanism depends upon his interpretation of the attitudes of others toward him. It evidences a good adjustment if not accompanied by an attitude of defense.

Compensation may appear in either of two common forms known as direct and indirect compensation. In direct compensation the individual attempts to achieve self-esteem or mastery by refusing to accept the threatening differentiation. He denies that any handicap exists and acts accordingly. In indirect compensation a person possessing a handicap may be driven to seek self-esteem in other areas entirely. The individual has given up attempting to deal with the perception of his handicap directly. He attempts to rehabilitate his damaged concept of self by "snowing under" the threatening perception with a series of other enhancing perceptions.[7]

Irrational behavior of children — stealing, vandalism, disobedience and bragging — should be thought of as attempts to compensate for frustrations rather than as deviltry or inherent wickedness. Adults have a greater awareness of the social consequences of their actions and select substitute satisfactions that will be acceptable to society.[4]

Some persons over-use this mechanism which is then termed *over-compensation.* The individual may develop habits of finding the easiest way out when he can't obtain a goal and thus portray qualities of resignation. Adler referred to over-compensation as an attempt to excel where one is weakest, for example, dictators such as Hitler. Over-compensation is energizing and leads to effective, though not necessarily admirable, performances.[3]

Thorpe refers to compensatory identification — the individual who feels that he has not attained sufficient distinction through his own efforts may manage to become a member of some exclusive firm, club, etc. He has initiated his Ego by identifying himself with a superior group or organization.[8]

Substitution: Kaplan and Baron refer to this process as "transferred compensation."[4] It is the process whereby one diverts energies from a desired to a substitute goal. The individual heightens his possibilities of success instead of being doomed to failure. In utilizing this mechanism it is necessary that the substitute goal do something about reducing the underlying source of tension or the individual is left with feelings of unhappiness. The following incident illustrates the use of this mechanism. Although this only represents a portion of this individual's problems, it demonstrates the effective use of the mechanism of substitution.

Miss Brown had worked to prepare herself a concert pianist, a field in which she had displayed talent. She had reached the stage of achieving the theoretical and practical aspects of this area, when she suffered a so-called "nervous breakdown," which prevented further progress. Rather than live a life regretting this disappointment, she entered a school for nurses. The direction of her efforts in this new field has

resulted in considerable success. This was not an easy achievement because, despite the external evidence of success, Miss Brown still experienced periods of unhappiness and inadequacy in her transferred compensatory effort. Within the past two years she has accepted the factors contributing to her earlier failure and has obtained the "peace of mind" that can ensue.

Reaction-Formation or Reversal Formation: Dr. Driscoll states that this mechanism comes into play when one possesses a negative emotion which is laden with guilt feelings, and transfers it to a positive one. The individual adopts feelings and attitudes opposite to those that would normally result in spontaneous action.[1]

(a) A child becomes angry at his mother so rather than strike her, he says, "Mother, I love you very much."

(b) In a social group, an individual who is actually shy and retiring, becomes noisy and bold.

(c) The individual who led a so-called "wild" life in his youth and then becomes a strong church supporter in his adulthood.

Sublimation: Many authorities state that no such mechanism can be described. Either real growth and change take place or, if the behavior is negative, it can be described under another mechanism. However the following information is available for those who consider it an adjustive mechanism.

Sublimation is the transference or substitution of one's desires or wishes into *socially acceptable* forms of expression. It is necessary in many aspects of life and is healthy if it gives real satisfaction.

In the sublimation of sex, the energy of the original impulse finds expression through other means. The expression is disguised, but it is the original impulse that gains expression. Hence successful sublimation reduces tensions and leads to satisfying behavior. This is the theory but it is subject to criticism. Whether or not direct sublimation takes place, substitute activity undoubtedly occurs when a basic drive is thwarted.

Sublimation may draw off a potentially dangerous excess of libidinal energy but it does not take the place of lasting satisfaction, which could be derived from attaining the original and desired goals.[4]

Egocentricism: Because of basic insecurity, the individual appears to need reinforcement of his Ego. So he attempts to establish himself as the centre of attention. Self-centredness is expected in a child. As he develops, he should become less self-centred and his demands for attention should give way, in large measure, to self-sufficiency and independence. Egocentricism in an adult represents a fixation of behavior at the childish narcissistic level. It is an inadequate technique for adjustment.[4]

This mechanism may be encountered in nursing some patients who seek greater attention, despite the evidence of adequate nursing care. In the classroom, it may be detected in students who use devious means to obtain the teacher's attention.

Mechanisms of Avoidance

Fantasy: This is literally forgetting reality, in which the individual substitutes imaginary satisfactions for real satisfactions. Having been thwarted in his efforts to obtain Ego satisfaction in the realm of reality, he finds relief from his tensions in the domain of fantasy.

When this mechanism is used to achieve a balance between active adjustment and imagined satisfaction, fantasy is harmless. It provides us with a temporary escape from the pressure of daily living. It is closely allied with creative thinking, which is an imaginative act. The process of the mental incubation of a discovery lies near the realm of fantasy. However, this mechanism represents maladjustment when it becomes a substitute for concrete achievements and for meeting the practical requirements of daily living. Withdrawal from reality into a world of fantasy characterizes psychotic behavior.

This is an area which should receive the attention of nurses. It is not wise to neglect the individual who is

too quiet and unassuming. He may be overusing the mechanism of fantasy.

Regression and Fixation: It is difficult to discern between regression and fixation unless one is skilled and is provided with the entire story of the incident concerned. Fixation indicates lack of progress beyond a certain level of development. At birth one is dependent and endeavors to achieve independence, both physically and emotionally. The problem appears most frequently as a clinging to emotional dependence. Many persons stop developing at the adolescent level, that is, they are emotionally independent for the pleasant things of life but accept no responsibility for the unpleasant. This is demonstrated in couples, who marry and accept financial assitance from home but resent any parental interference.[1]

Regression is the return to behavior patterns that have outlived their usefulness. It indicates emotional infantalism in a weak and insecure "inner being."

> Regression is not a true mechanism. It is a general characteristic of many forms of maladaptive behavior.[2]

In children this behavior may be observed when a new baby enters the family circle and a child of three or four years regresses in respect to elimination habits. Parents pave the way for regressive behavior when they are overindulgent and overprotective of their children.

> The primary condition underlying regression is the failure of the individual to cope with his present adjustment problems satisfactorily. Another factor that underlies regressive behavior is the tendency to remember only the pleasant experiences of the past, forgetting much of the unpleasant.[3]

This mechanism may have temporary value as a release from tension or unpleasantness, but overuse ultimately results in unhappiness and is a serious peril to personality development.

Negativism: Among the most common techniques in dealing with threatening perceptions is the denial of such perceptions in one form or another. This is particularly common among children but often exists in adults as well. Negativism can be used as a very positive device for seizing control as illustrated by a child who refuses to eat his meals or the technique employed in industrial strikes.[7]

> It is a nonadjustive emotional response of the rage type. Its original stimulus seems to be an interference with self-initiated activity of the individual. The motor aspect of the rage response becomes inhibited by training and fear of punishment but the emotional mood remains.[4]

It is an avoidance mechanism which protects the Ego by the resistance of involvement in undesirable activities and is an Ego gratification which compensates for the loss sustained. Problems are not solved by negativistic behavior regardless of the apparent amount of internal satisfaction derived. The mechanism is displayed in persons who, without justification, rebel against authority, suggestions or the accepted mode of life — the stubborn die-hard who refused to compromise.

Motor Hysteria: This mechanism is the technique of developing symptoms which enable an individual to withdraw from a difficult situation. This is an unconscious device in which the individual avoids an unpleasant situation and absolves himself from guilt. It differs from malingering, because the malingerer feigns an ailment. The hysteric actually feels his ailment although there is no organic basis for his difficulty.[4]

Malingering is a compensatory mechanism in which the subject attempts to escape the odium of inadequacy through feigning illness or physical disability. It is a process of creating infirmities which can be used as an escape from responsibility or as an excuse for failure. Functional dissociation is a retreat from reality, in which the emotionally tense organism develops, without foreknowledge, physical symptoms which solve the conflict and preclude the need for further action. As a result of intense fear or conflict an individual's physical functions may become seriously impaired.[3]

Conversion occurs when a person is faced with a conflicting situation that he cannot solve on the level of conscious awareness. Somatic symptoms of various kinds appear — hysterical motor manifestations, headaches, vomiting, diarrhea. There tends to be a relation between the individual's capacity to tolerate conscious anxiety and the appearance of psychosomatic symptoms.[5]

> Conversion results when tensions from unexpected emotions are converted into a physical discomfort. The weakest part of the organism tends to be broken down by tension. For example — in anger, the blood sugar level rises. If anger continues long enough, diabetes mellitus may result. A diabetic is often a hostile person. This is the major aspect of psychosomatic medicine, as is evident in gastric ulcers, ulcerative colitis and asthma.[1]

For nurses, the obvious conclusion to draw from these opinions is an awareness of the origin of psychosomatic illness. The individual who develops such conditions should be encouraged to adopt desired adjustive behavior. This is an important aspect of assisting the individual toward recovery. From the viewpoint of personal mental hygiene, the nurse should realize that it is a type of behavior that does not solve problems.

Identification:

> This is a type of fantasy in which an individual, afflicted with feelings of insecurity and inadequacy, vicariously assumes the role of a person of superior attainment.[6]

This means the literal copying of an individual whom one admires. *It is a part of the growing-up process.* The child identifies with the parent of the same sex (if admired). As he develops he begins to copy adults whom he admires (identifying with a renowned athlete). In adulthood many identify themselves with a profession. This mechanism is a normal reaction and one that can be helpful and stimulating. However, it should not become a substitute for concrete reality, or social action.[6]

In the extreme use of this mechanism, the process of identification may proceed to the point where the individual loses his own identity and actually thinks he has become another person, for example, in delusions of grandeur, the individual may believe he is some famous, influential person (Napoleon).

Summary

Adjustive mechanisms are utilized in the process of daily living to prevent disturbing threats and tension from interfering in the attainment of ambitions and happiness by the normal person. The maladjusted individual uses the mechanism to protect himself from both major and minor threats, so he possesses insufficient energy to develop a constructive adjustment.

In conclusion, how may the mechanisms contribute toward a satisfactory adjustment or, conversely, fail to provide a satisfactory adjustment? The adjustive mechanisms serve as palliatives comparable to drugs that reduce symptoms without curing disease. The reduction of symptoms permits the body defenses to operate to establish health. Likewise the proper use of the mechanisms assists in the development of mental health. They may act as a protective shield while we are learning more mature and realistic ways of solving our problems. They provide a time element to solve problems that might otherwise overwhelm us. The mechanisms may permit experimentation with new roles and hence lead to new modes of adjustment. When we adopt new roles for faulty reasons, as in reaction-formation or misjudge people as in projection, we expose ourselves to corrective experiences from which we may learn social techniques. What begins as self-deception, may provide occasions for modifying the self.

However, if one depends on defense mechanisms for protection, one may never achieve mature modes of conduct. Withdrawing from social contacts may usurp the role of reasoning and isolated behavior may take the form of useless rituals or wasteful compulsions instead of creative effort. Even socially useful behavior, if it has its roots in irrational purposes, will not prove completely satisfying to the person. Overdependence on

reality-distorting mechanisms leads in the direction of personality disturbance.[3]

Kaplan and Baron, in evaluating the adjustment mechanisms, use the following criteria, which anyone can apply:

1. Does the mechanism reduce the felt tensions of the individual and minimize his anxieties?
2. Is the mechanism socially approved?
3. Does the mechanism facilitate further adjustments?[4]

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Flight Nurses

Royal Canadian Air Force

GWEN M. SOMERS

THE TRANSPORTATION of casualties by air dates back to 1870 when, during the siege of Paris, 160 patients were successfully evacuated by balloon.[1]

Air evacuation expanded during the years prior to World War II. At first it might be said that the evacuation of patients by air was considered by some with active disapproval and skepticism. On the other hand others were far-sighted enough to see the advantages of air evacuation. It did take considerable time, however, to defeat the opposition to airlift of sick and injured.[2]

World War II proved that it was not only possible to move patients by air, but it was safe and practicable as well, both from a medical and a military standpoint. The speed with which treatment can be given when patients are evacuated by air accomplishes these important objectives:

(a) Reduces loss of life from shock;

(b) cuts down on permanent disability;

(c) shortens period of hospitalization and makes possible an earlier return to duty;

(d) makes it possible for a small number of personnel to care for casualties;

(e) cuts down on the supplies needed in forward areas;

(f) increases the morale of both the

Flight Lieutenant Somers, a graduate of Toronto General Hospital, is presently at Air Force Headquarters where she is assistant to Principal Matron S/L Oakes.

Aboard an Air Evacuation Aircraft

patients and the effective troops left in the battle area.[3]

Late in 1942, it became evident that due to the acute need for aircraft of all types, planes could not be assigned solely for use in air evacuation. Experience had shown that regular transport planes, already designed for forward transporting of troops and material and equipped with removable litter supports, could be used for evacuating casualties from a theatre of war.

There is no doubt that predictions made about the value of air evacuation of patients have been more than fulfilled. During World War II patients were removed from battle zones to definitive care at hospitals a few hours after they had been injured.

Since the war, many improvements have been made in techniques, equipment and administrative procedures to make air evacuation safer and more comfortable for patients. But improved aircraft and equipment alone will not make it possible for the success of air evacuation to continue. Each evacuation flight must be accompanied by a highly trained and efficient flight nurse or the safety of the patients cannot be assured. Thus, rapid growth of aerial transportation has opened still another specialized field, *aeromedical nursing*.[4]

The medical and nursing care of patients in flight involves the same objectives as does care in the hospital ward; only the environment is different. Any medical or surgical care available to the patient on the ward of a well-regulated hospital is likewise available to patients in flight. In fact an air evacuation plane may be thought of as an airborne ward. The objectives of instruction in the Flight Nurse Course are[5]:

(a) To orient and indoctrinate student flight nurses in the basic principles of aviation medicine in order that they may understand the problems imposed on human physiology, therapeutics and nursing care by flight.

(b) To enhance the development of skills and techniques required for aeromedical nursing of medical and surgical patients, and those with personality disorders.

(c) To acquaint the student with the history, development and present organization of air evacuation and the equipment, materials, and planning necessary to transport patients safely by air.

(d) To provide knowledge of crash, ditching and survival procedures and preparations necessary to evacuate disaster victims.

Special training is provided in a five-month course in aeromedical nursing being offered by the USAF School of Aviation Medicine at Gunter Air Base, Montgomery, Alabama. Students devote six weeks to work in the classrooms and three months to supervised experience with active air evacuation units.

Since 1948 the Royal Canadian Air Force has sent 36 RCAF nursing sisters to the USAF School of Aviation Medicine to be trained as flight nurses. Upon completion of this course the nurses proceed to Hickam Air Force Base, Hawaii, to complete the practical phase of their course. While here, trips to Tokyo, Guam, Manila and California are made. The outbreak of the Korean hostilities necessitated the institution of full-scale air evacuation. Patients who were not able to return to the battle area were flown to Japan. By the time they arrived, the first stages towards rehabilitation had already been started and they were well on their way to recovery. From Tokyo, they were returned by air to Honolulu. There they remained in hospital for further treatment or until the next airlift was scheduled to take them home to the United States. Canadian servicemen followed through the same channel of evacuation. Once stateside, the continental division of MATS (Military Air Transport System) flew the wounded to the closest medical centre to their homes. The Canadians were routed to Madigan Army Hospital, adjacent to McChord Field, Washington, and thence back to Canada by RCAF airlift.

The experience gained while flying with the Korean airlift in the Pacific has been of inestimable value, not only for the experience gained from the practical application of the theory taught at Flight School, but also for the opportunity to see new parts of the world and meet people from so

many different countries. The training RCAF flight nurses received while with the USAF was used for the repatriation of the sick and wounded casualties of Korea and the continued air evacuation to their homes in Canada. Today, flight nurses are stationed at strategic points across Canada and the Canadian airlift carries patients to their homes as far east as Newfoundland. The aircraft for this airlift are usually supplied from 435 (T) Sqn. at Edmonton, 426 (T) Sqn. Lachine and 412 (T) Sqn. Rockcliffe and are North Star or Dakota aircraft. From Vancouver to Halifax is 2,520 air miles, and with good weather conditions the trip can be made in three days. Usually the first overnight stop is at Winnipeg, the second at Montreal. During overnight stops the patients are given care in the DVA hospitals, dressings are changed, hot meals given, or any necessary medical care which is indicated.

The work of a flight nurse could not be called glamorous, but it is one of the most satisfying forms of nursing. The morale of the patients is of the highest and their cheerfulness and grateful thanks far exceed any hardships that might ever have to be endured.

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Pioneering in Okinawa

Editor's Note: The following letters give us a glimpse into the activities at Vista Maria-in-Okinawa, the only convent in a radius of 400 miles. The writer, Sister Mary Carmel, F.M.S.I., is the superior of the missionary sisters, the Daughters of Mary, Health of the Sick. The sisters went to the Island in September, 1953.

Sister is the former Clarissa Hurley who, after graduating from Hotel Dieu School of Nursing in Chatham, N.B., was employed at Halifax Infirmary, Halifax, N.S., Ottawa Civic Hospital and St. Joseph's Hospital, Saint John, N.B. She entered the Daughters of Mary, Health of the Sick at Vista Maria, Cragsmoor, New York, in 1949. We are sure that Sister's pioneer work will be of interest not only to her friends, but to all Canadian nurses.

* * *

WE SET APART ONE ROOM of our convent for a dispensary. At first a few patients came to be treated, then more, and now we have an extremely busy schedule. One person will tell another about us and so on until a large number have come to know the "Dotei-Samas" (Sisters). Take this case as an example:

One lady brought her little boy in to have an infected ear treated. She was very faithful and brought the child back each day until finally the ear was healed. About a week later the same woman brought a friend and the latter's son from another town. Apparently they had been visiting in our neighborhood and had heard from the first woman about the cure of her son's ear. The

Giving Skilled Care

friend was eager to bring her son who had a very sore and swollen nose. We gladly treated him and a few days later they returned with a bouquet of wild flowers in payment for the boy's recovery. Another week went by, and the first woman was back with another visiting friend who had sore eyes. And so from one to the other, we've come to be known and trusted by many.

Daily we give vitamins and milk to the children, all of whom are suffering from vitamin and protein deficiencies. Because some of our sick are too ill to come to us, we visit many in their homes giving them, besides nursing care, much needed food, clothing, and vitamins. I wish you could see the faces light up when they see us coming with a bag of rice! The poor of Okinawa are very poor, and many of them do not have enough to eat.

On the Road

When we go to the homes and see people with sore eyes and skin lesions of all kinds we tell them to come to us and we will take care of them. Some do come but they are so accustomed to these diseases that they do not take them too seriously.

We have visited many of the homes. The mothers may be with the children, usually just outside the door doing the wash. So many men were killed during the battle here that women are working everywhere. As the work on the roads in the native villages is done by hand, women carry the rocks and dirt in baskets to fill up the ruts. They also work side by side with the men roofing the houses. Of course their own homes are very low, but they also work on government buildings which are two-storey, climbing up and down the ladders, fixing the locally-baked tile roofs. Great poverty exists as a result of the complete destruction of war, so when a person does stay in bed it means they are just too sick to walk! For most of them, it is the beginning of the end.

A Typical Okiniwan Home

Century after century on Okinawa, the sick have been cared for by the family. Consequently, in many cases, facilities for the sick adjoin the doctor's office. Such places resemble a rooming-house rather than a hospital, for no heat, water or food is supplied. The family brings in all bed clothing and necessities, cares for the patient and does the cooking at the bedside. The patient lies on the floor on a mat. As many as four patients and their families may occupy a typical room.

Tuberculosis is a problem on the Islands. The tubercular people work longer, from necessity, than Canadians; which means that doctors seldom see a person who can be cured even with the treatments that are now available. It was not so bad before the war, but during the Battle of Okinawa, the people were literally under the sky. We were told that when the battle started, the women and children left their homes and walked to the northern part of the Island. They were out in all the rain and ate only once a day. When the battle was over they came back to devastated houses. In one area where 300,000 people had lived, just a few dozen habitable homes were left. In the one-room homes, disease rapidly spreads through a family.

One morning when we were walking down a narrow path, a woman came running to show us a home where there was a sick man. We found a 28-year-old Okinawan who, to our surprise, spoke English as well as we. (He was an interpreter before he became ill.) He was lying on blankets on the floor. His mother, an elderly lady, was taking care of him. We learned that two years before he had spent three months in one of those doctor's office-clinics. He was told he had tuberculosis and sent home. I saw blood flecks on his shirt. He said the doctor, whom he had not seen in six months, told him this bleeding was

from his lung. We cared for him and made him as comfortable as we could. He had a little mirror by his head, and when I finished, he looked at himself and said, "good looking," meaning "that looks good." He has such high hopes of getting better — it is really sad. An army cot was found for him. When we got him into it, he was so happy, his hopes of recovery soared twice as high.

This morning I asked him if there was anything special he would like to read, and he replied, "Yes, I would like the New Testament in English. I can read English and I would like to compare it with the one I have." He showed me his. It was in Japanese. He got it when he was a prisoner of war in San Francisco. He was in the Battle of Okinawa, was taken prisoner and was in California for six months.

Normally we would say that a man in his condition was dying, but there is no saying how long these people can live like that. He is bright and happy.

Friends among the Children

We have a slit in the front door with a box under it to catch the mail. When the door is closed, we often see pairs of brown eyes at the mail slit as the children peek in or maybe a hand sticks through. The people are very friendly and are noted for their gentle, docile ways.

One day we took some of the children with us on our mission trip. They had not seen the China Sea and were quite excited as I drove by it in the jeep. Sister asked if they would like to be fishermen. They replied no, because they would not want to live on water. We discovered Sister had used the word "fish" instead of the word for "fishermen" and the children thought fish must live on water as they saw no other food in sight. When we got that straightened out, I asked, "Well, what would you like to be when you grow up?" His eyes big with that longing envy of childhood, the little boy behind me replied, "A jeep-driver."

A Guide to Better Food Habits

If we take an honest, appraising look at the current food fad situation, we reallize that a simple guide to better food habits may be welcomed by some of our readers. The following suggestions should help to provide a serious, sensible approach to the daily business of eating and living:

1. Use Canada's Food Rules as your daily guide to healthful eating. They advice you to include milk, meat, fruit, potatoes, and other vegetables, whole grain cereals, bread with butter or margarine, eggs and cheese every day.

2. Consult a reliable source of ethical medical advice when you have serious feeding or diet problems. Don't allow yourself to be misinformed or misled by advice from neighbors or friends.

3. Don't let your powers of reasoning become dulled by your emotions in planning either a normal or a reducing diet.

4. Be suspicious of any food or product or eating plan which is claimed to prevent or cure numerous diseases. Similarly, be on guard against the person who makes specific and fantastic claims for his product, with no regard for the wisdom or practicability of the statement.

5. Avoid the use of exploited "food supplements" to replace or supplement your normal daily choice of foods — unless prescribed by a physician for a specific nutritional purpose.

6. Consult ethical scientific journals or reliable publications for food information. Quacks and faddists do not write for such journals, nor do they present addresses or talks at conferences and conventions sponsored by reputable scientific organizations.

7. Beware of the pseudo-scientists who are eager to sell anything — be it a pill, a pamphlet or a "wonder food"! Reliable and up-to-date nutrition information, and practical guidance in meal planning and food preparation are available, free, from federal and provincial government departments, as well as from many consumer service departments of reputable industries and voluntary organizations.

NURSING SERVICE

The Registered Nurse - A Specialist

Psychiatric Institutions Need Them

H. S. ATKINSON, M.D.

IT IS ACKNOWLEDGED at the very beginning that grave difficulties have been encountered in developing the argument in this article. This would seem to be a poor introduction, when one would fervently wish his pen endowed with a special gift because the need is so great and immediate. It would, however, seem necessary to acknowledge a "disability" before we can hope to "cure" it. It is perhaps almost natural that a doctor would use this approach. The "symptoms" are indeed serious and are clearly indicative of a grave condition called a "shortage" of certain aids in the arts of healing. If the doctor is, in addition, an administrator of a Psychiatric Institution — and continuing our analogy — the prognosis is far from reassuring. The need for registered nurses in Psychiatric Institutions may be easily dealt with — amenable to treatment — but how to deal with the very highly competitive field in which registered nurses can participate is quite another thing. The best we can do is to be factual and sincerely present the situation as it is seen in the hope that seeds of interest will be sown which will flower to attract registered nurses toward the field of mental illness and defect.

Our title perhaps requires an explanation. The registered nurse has indeed become a *specialist*. By precisely the same methods that produce specialists in any other field she has entered into a different era. By increased entrance standards to schools of nursing, by greatly increased learning from expanded curricula to postgraduate and university degrees, she can hardly be expected to remain the same nurse of a few years ago. Due to the very fact of insufficient recruitment her specialism has become more desired and the premium on her services has become high. She has earned it. When the call for her service has merited her response she will be found in the wilderness, in the outpost, in the danger of battle, in the slum, in the air, and underground. Her courage and skill are unquestioned. The high premium placed on her services is not always paid for in material gain either, because she will be found in social work, in orders pledged to service to her fellowman with no outstanding reward. She is indeed a specialist in all terms and in many fields. Why then do we find Psychiatric Institutions in such dire need? It may be more apparent than real. The fact is that all fields seeking her service are suffering shortages, even those that were the cradle in which she was raised. Envy of others may be unfounded and our inferiority complex an evidence that we are poor therapists. We must be as courageous and skilful, if possible, as the nurse.

We therefore proceed to develop our argument. The first consideration is the need — an absolute one — for the nurse specialist in Psychiatric Institutions. Some generally accepted

Dr. Atkinson is medical superintendent of The Manitoba School at Portage la Prairie, Manitoba.

and proven facts are presented:

The incidence of mental illness and defect is alarming.

More families are affected than by any other human ailment.

There are as many beds in mental institutions as in all others for the sick.

The economic loss and the personal loss to human rights far exceed any other disability.

The new Psychiatric Institution is using modern techniques and treatments requiring the hands of the skilled nurse as much as any other hospital.

In training their own staff the Psychiatric Institutions need leaders and teachers. As the primary disciplines are the medical sciences only nurse specialists can be the teachers for much of such programs.

The above is perhaps only part of the need, yet it is a formidable array. It is somewhat disconcerting to one who has spent a lifetime with the mentally afflicted to read such comment as this: "The field of mental illness seems to offer some interesting possibilities for the registered nurse." Interesting possibilities ! ! It offers a challenge to the best they can give — and we need it now. But perhaps we did not present the case.

The proposition mentioned at the beginning of how we were going to enlist the help we need was stated as another matter. And so it is! Any clear window has two views — one in, one out. It is incumbent on us to present the other view. We find nothing in it of a critical nature. Good reason is the essence of any bilateral agreement. I therefore attempt to present the desirability of registered nurses joining our ranks and, even in these days of rather "vicious" competition, we would not put on rose-tinted glasses to read the findings of our argument.

The need of all institutions is an ancient thing, whereas the nursing profession is very young. It is only 101 years since "The Lady of the Lamp." The first school of nursing in Canada is only something over 80 years old.

Statistically, according to birth rates the number of 18-year-olds is never enough for recruitment for all present and anticipated needs. Many other professions are in the same position. The nurse is not the villain of the piece!

The present number of registered nurses in Canada is, perhaps, 50,000. More could easily be used.

The "young profession" is under extreme pressure from all sides. Its most philanthropic leaders could not be expected to stem or turn the tide. Glowing opportunities are offered by commerce, industry, transportation, chain stores, offices — and husbands. From global travel to the highest calling — just mothers — they can operate, participate, and control more human situations with grace, dignity, and skill than any others. What competition, all justifiable, legitimate, satisfying, rewarding, that we have to meet! With the new Psychiatric Institutions now appearing it is felt there is a rebuttal.

Nursing administrators, for large staffs, in large institutions, carrying large responsibilities, *are needed.*

Instructors in Psychiatric Schools of Nursing (and in Manitoba at least) combined with Licensed Practical Nursing *are needed.*

Medical nursing specialists to direct ward nursing services, modern methodology, and implication of modern treatments *are needed.*

Surgical nursing specialists are needed for modern psycho-surgery and other surgical procedures.

In research projects nursing specialists are needed, not only for the projects but for their highly trained powers of observation and ability to relate facts on scientific basis.

In Psychiatric Institutions new and modern buildings offer superior workshops as found in the best of hospitals in which the nurses's skills are not lost in struggles with poor equipment. Diagnostic aids such as basal metabolism, electrocardiograph, x-ray, electroencephalograph, physiotherapeutic apparatus, allow her to continue among the familiar aids of her training.

Working hours are in line with the modern conception of maximum efficiency with the shortest working hours.

Psychiatric Institutions (at least in Manitoba) are close to large centres with easy transportation to recreational and cultural activities.

Nurses' residences provide good living accommodation and maintenance rates are indeed very moderate.

Privileges under Civil Service appointment provide generous holiday leave with pay, sick leave benefits, and superannuation rights. There is rest for the hardest working, security for the well-intentioned, and earned retirement funds in life's last years. There are no better in any field and few can equal these provisions. These emoluments of service are given with special reference to Manitoba but are not alone to be found in Manitoba.

Bursaries under Dominion-Provincial Health Propects are available under certain conditions for those showing special abilities and promise for high posts of responsibilities.

If these concrete facts are not enough by themselves, there does remain one that has no precise measure but is the privilege of all. That is the opportunity for service to our afflicted fellowman. This has unlimited possibilities, dictated by the most potent forces man has ever had — his ideals. When one can look back along the road of life there have been battles won and lost. There have been losses and gains. There has been success and failure. But the one value that has survived the most destructive forces in human history is man's ideal of service in God's name.

I close with a quotation from a poem by George Santayana, Spanish-born American philosopher, one time professor of philosophy at Harvard University (1889-1912), who was at one time regarded as a materialist. I wonder! Perhaps he looked back on the road of life when he wrote:

Oh World, thou choosest not the better part
It is not wisdom to be only wise
And on the inward vision close the eyes,
But it is wisdom to believe the heart.
Columbus found a world and had no chart
Save one that faith deciphered in the skies.
To trust the soul's invincible surmise
Was all his science and his only art.
Our knowledge is a torch of smoky pine
That lights the pathway but one step ahead
Across a void of mystery and dread.
Bid then the tender light of faith to shine
By which alone the mortal heart is led
Unto the thinking of the thought divine.

Organizing Public Health Services

E. Anne Wake

Banff! — the very word causes most people on our continent to envision the Creator's handiwork at its majestic loveliest.

Banff! — the very "ultimate" in a traveller's dream.

Banff! — to twelve nurses who lived there, a town without a public health nursing service!

Some of the mothers who couldn't afford regular clinic fees, vaccinations, and inoculations for their children, just weren't attending to this all-important health "must." Doctors were greatly overburdened with work that properly trained nurses could do.

Our author is an active member of the Banff-Canmore Chapter of the A.A.R.N.

Banff! — the town that had *everything,* had *nothing* in the way of a public health program for its own children!

The twelve nurses decided this would be their project, although at first thought, it seemed rather overwhelming in view of their small numbers. There followed long and careful preparation. First, "Red Tape!" (what a pity it couldn't have been used later on, for clinic gowns!)

Banff, being in almost a stepchild category, is *in Alberta,* but at the same time, is *in a national park,* and therefore not in a position to benefit from the provincial public health program because it is directly under the jurisdiction of the Dominion Government. Thus, long before weighing scales,

hypo needles, and arrowroot cookies were needed, it was necessary to obtain many a permit!

The approval of the superintendent of Banff National Park, the medical health officer for Banff, the various medical clinics, and the staff at the Banff Mineral Springs Hospital was sought. Hearty endorsement by all soon followed and one hurdle was overcome.

What next? Twelve "slightly rusty" nurses who were also young mothers, took a refresher course given by a local doctor. Further help was forthcoming through an enlightening lecture from the nursing director of the Public Health Department in Edmonton.

Now, with the twelve nurses "dusted off," and feeling more self-assured, it was time for the question, *where* could they procure the money needed for their undertaking? A canvass of the town's service organizations brought the gratifying total of well over $100! With these funds, the nurses rented humble basement quarters for their clinic and obtained the necessary supplies.

The next item on the agenda — *who* would convene this project and make it function smoothly and efficiently? The only member who had no job and no children was persuaded that she had real talent along this line!

The nurses soon found themselves doing everything from scrubbing concrete floors that promptly emitted dust again as they dried, to making a "Well Baby Clinic" sign for outside the building. Because most of the members were mothers with small children, or were working, the problem of staffing was the greatest during those first several months. Four nurses were needed for each clinic period, and "madame convener" had her headaches! However, through the years, since the Well Baby Clinic began in March, 1951, both interest and membership have grown, thus eventually eliminating the staffing problem.

Clinic Day

For the first 18 months, a doctor was on hand for consultation for one hour during the clinic period, but this was found to be unsatisfactory. The mothers who needed a doctor's advice seemed to arrive either too early or too late to consult him, and the doctor often wasted precious time waiting around.

No further problems were encountered, other than to have a mother complain that her children "always got colds after they took them Vitamin D drops!"

Today, with the Clinic prospering, and a greatly enlarged group, the members have undertaken the conversion of an unused room at the Banff Mineral Springs Hospital, into a cheery Children's Ward.

Every now and then go away, have a little relaxation, for when you come back to your work, your judgment will be sure, since to remain constantly at work will cause you to lose power of judgment . . . Go some distance away because then the work appears smaller and more of it can be taken in at a glance, and a lack of harmony or proportion is more readily seen.

— LEONARDO DA VINCI

Short Course in Human Relations.

Five most important words: I am proud of you.

Four most important words: What is your opinion?

Three most important words: If you please.

Two most important words: Thank you.

Least important word: I.

— *Citizenship Items*

Cholecystitis and Cholecystectomy

NORMA JOAN KILLEEN

THIS INTRODUCES MR. HICKS who was admitted to the Royal Inland Hospital, Kamloops, B.C., on June 8, 1954. He is 49 years old, a Protestant, a carpenter by trade. He appeared distressed by financial worries and wanted to regain his health and return to his trade. He was a very nervous and apprehensive individual at first and appreciated our interest in him and reassurance as to the course of his illness. At every opportunity he would speak of his three children to whom he appeared very devoted. As he progressed towards better health, he was found to be a fairly cheerful and cooperative patient.

On examination, Mr. Hicks was very distressed with right upper abdominal tenderness and indefinite pain in the epigastrium. Two small nodules were felt below the ribs on the right side. He stated he had been unable to eat greasy or gas-forming foods. He gave the history of having had this discomfort since 1941. X-rays were taken at that time but the results were unknown here. In May, 1954, he had epigastric pain for about two weeks continuously, then was free from it until his present attack. He was in hospital for investigation, by gastro-intestinal x-ray series, for a possible peptic ulcer and for cholecystograms.

When admitted, Mr. Hicks was having severe epigastric pain. He was nervous, apprehensive, complaining of insomnia and anorexia. Discomfort was not relieved by eating. Demerol 100 mgm. every four hours was ordered for discomfort. Amphojel, drams 2, with tincture of belladonna minims 10, was given four times a day. The amphojel reduces the acidity in the stomach while the belladonna relieves spasms of the stomach, gall bladder and bile ducts. These medications gave relief of discomfort for only short periods at a time.

Mr. Hicks had to be treated for his possible peptic ulcer and was, therefore, placed on a second-week ulcer diet, which is composed of non-irritating, bland foods with caloric content sufficient for body nutrition. It consists mostly of eggs, milk and bland vegetables. Feedings were given frequently and he was encouraged to eat slowly and chew his food thoroughly.

For cholecystitis, fats are restricted, adequate protein is given, ample carbohydrates are taken to stimulate the flow of bile without irritating, water and skim milk are given. Again, small meals are given at regular intervals. Efforts were made to try and obtain foods that would cause as little disturbance to him as possible.

Mr. Hicks frequently complained of anorexia and indigestion. Anorexia could have been caused by the lack of bile. To counteract the indigestion, the amphojel was changed to drams 2 after meals and as required. He was troubled by nausea and vomiting and usually appeared tired and listless. Repeated enemas had to be given for constipation and he ran an intermittent temperature.

He appeared to have very severe spasmodic discomfort in the epigastric region. Demerol was usually given to relieve this, but on one occasion, when the spasms appeared more severe, largactil 25 mgm. was also administered. This gave only short relief of the spasms.

On June 17, Mr. Hicks had a very severe attack of sharp, spasmodic pain in the right hypochondrium, radiating through to the thoracic region of his back. Morphine gr. ¼ was given for its sedative effect along with atropine gr. 1/100 and hyoscine gr. 1/150. These last two drugs aid in relieving gall bladder colic and reduce hypermotility of the stomach or intestine. Some relief of symptoms was obtained.

Many x-rays and other diagnostic tests were to be done. Before these were taken, the routine of these pro-

Miss Killeen is now a senior student at Royal Inland Hospital, Kamloops, B.C. This study won her the first prize in the 1954 Macmillan Awards.

cedures was explained to Mr. Hicks and the necessity of following the instruction for the tests was stressed. A barium swallow was taken, which is an x-ray examination very useful in diagnosing gastric ulcers or any obstruction by outlining the tract. This examination showed no evidence of a gastric ulcer, but showed that one had been present as there was a scar in the middle third of the stomach. A barium enema was also given but no organic lesion was present.

Since traces of blood are often found in the stools of persons affected by gastric ulcers, a stool specimen was sent to the laboratory. The report was negative for occult blood. The only abnormality noted was an increase in the white cells count to 12,300 per cu. mm. This, together with the elevated temperature, denoted the presence of some infection.

Mr. Hicks was prepared for a gastric analysis, a test used mainly for diagnosis of peptic ulcers. The procedure of Levine tube insertion was explained to him and the morning meal was withheld. If an ulcer is present, there is nearly always a higher than normal concentration of acid in the stomach. However, throughout the test, the total acidity was within normal limits. After the stomach tube was inserted, the stomach contents were aspirated. On the fasting speciment no hydrochloric acid was noted. When 50 cc. of 7 per cent alcohol was added via the tube, HCl was present at 40°, the normal being from 20° to 60°. On the three tests following this no free hydrochloric acid was found. Absence or marked decrease in free hydrochloric acid is indicative of gall bladder disease, gastritis or pernicious anemia. Blood was present in small quantities but no bile was noted.

The patient was then prepared for a series of cholecystograms. A flat plate was taken first. The evening before, a fat-free supper was provided and telepaque tablets were given directly after. These tablets are especially designed for use in visualization of the gall bladder and duct system. Calculi are more readily visualized. Untoward reactions are less frequent with telepaque tablets than with drugs that have been used previously. Still, nausea, vomiting, and anuria do sometimes occur and they must be watched for. Any abnormality of the gall bladder may prevent the concentration of this drug in the organ and thus it will not be rendered visible.

On return from the x-ray, a fatty meal was given after which another x-ray was taken. This fatty meal causes the gall bladder to empty and determines the presence of any material in the organ. Mr. Hicks did not complain of any increased severity of symptoms after this meal. The report from the x-ray department revealed that the gall bladder was unable to concentrate the dye sufficiently to outline the viscus. A round opacity was noted which was thought to be a gallstone.

A pre-operative diagnosis of gallstones was given and Mr. Hicks was prepared for surgery. He was placed on a soft diet to aid in building up his general physical condition before undergoing his cholecystectomy, although on admission, a physical examination had been done by his doctor and he had been pronounced a healthy individual. As the liver and gall bladder are so very close together diagnostic tests had to be done to eliminate the possibility of any impairment of liver function particularly since there was some jaundice.

To find out if the jaundice was due to an obstruction or to excessive blood destruction, a van den Burgh blood test was done. If a direct color reaction is obtained when a specially prepared reagent of sulfanilic acid and sodium nitrate is added to serum, it indicates that the jaundice is of the obstructive type. This type produces clay-colored stools. Mr. Hicks' reaction was negative. The indirect test using an alcoholic extraction of the serum to produce color is indicative of hemolytic jaundice. With this the stools are normal in color. Mr. Hicks' indirect test was 0.1 mg. per 100 cc., and the normal amount of bilirubin in the serum is from 0.25 to 1.5 mg. per 100 cc.

A thymol turbidity test for liver damage was done. This test is usually positive in infectious hepatitis and negative in cases of jaundice due to

extrahepatic obstruction; it was negative in this case. A cephalen-cholesterol flocculation test was ordered. This demonstrates a change in plasma proteins that is usually constant with liver damage. Normal is zero to plus one. Mr. Hicks had a reading of plus two. His white blood count was rechecked and it was found to be 9,300 per cu. mm.

Before going under an anesthetic, the kidneys as well as the liver should be checked as so many anesthetics affect these organs. A non-protein nitrogen test was done and found to be within normal limits at 30 mg. per 100 cc. blood. This is usually a fasting test.

Mr. Hicks was nervous and apprehensive pre-operatively. Explanations of the procedures carried out helped him somewhat. By reassuring him of the capabilities of his surgeon, of the new methods and equipment of hospitals today, and trying to maintain as quiet and unhurried atmosphere as possible, he seemed to be aided to some degree.

Shaving preparation was done from nipple line to pubic region. This is done to ensure adequate skin disinfection. A soap suds enema was given. If the contemplated surgery does not involve the intestines themselves, it is usually better psychology to give the patient the enema the evening preceding the operation rather than on the morning of surgery. The evening before surgery, Mr. Hicks was given seconal gr. 1½ to ensure adequate rest, sleep, and to allay fear and apprehension. Nothing was given by mouth for approximately eight hours preceding his operation. An empty stomach allows anesthesia to be induced more easily, reduces the possibility of vomiting and the consequent dangers of aspiration and overexertion post-operatively.

On the morning of operation, June 25, a urine specimen was sent to the laboratory, seconal gr. 1½ was again given to allay fear and apprehension. The action of seconal is not carried over into the period of anesthesia, but will lessen the amount of morphine and atropine needed. Its use as an analgesic lasts only about half an hour. This was followed by morphine sulphate gr. 1/6 and atropine gr. 1/150. Morphine depresses the sensory and psychic areas of the cerebrum thereby quieting the patient, allaying fear and making the induction of the anesthetic easier. Respirations must be checked as morphine depresses the respiratory centre in the medulla, giving slower and shallower respirations. The heat regulating centre is depressed and diaphoresis may be present, therefore, the patient should be kept warm and free from draughts. Atropine decreases the secretions of the saliva and mucus in the nose, pharynx and bronchi, thus leaving the mouth and air passages dry. It also favors the absorption of the anesthetic agent and makes the hazard of aspiration less. It is a heart and respiratory stimulant.

Mr. Hicks was taken to the operating room for a cholecystectomy and was inducted under pentothal sodium, cyclopropane and nitrous oxide. Sodium pentothal is a powerful, intravenous, ultra short-acting barbiturate. It provides a rapid, timesaving and more pleasant induction. It is generally used in a 2½% to 5% solution, the amount, though, being dependent on the needs of and the effect on the patient. It is rapidly destroyed in the body. It is a depressant acting chiefly on the cerebral cortex. Respiratory depression can be very great depending on the rapidity of induction, therefore atropine sulphate should always be given previously. Muscular relaxation is good except for the muscles of the abdominal wall, pharynx and larynx. If sneezing, coughing or twitching occur the injection should be discontinued.

Nitrous oxide may be given as a prolonged anaesthetic if the gas is used with the necessary amount of oxygen. It is a respiratory depressant and cyanosis must be watched for. Untoward effects on the kidneys, liver, circulation and respirations usually come from an oxygen deficiency. It is most frequently used as an induction anaesthesia.

Cyclopropane, a colorless gas, is administered by inhalation. It is explosive but has a wide margin of safety and oxygen can be given with it. It has a greater muscular relaxation than

nitrous oxide but causes more post-anesthetic nausea. Respiratory depression may come on very rapidly and danger signals, such as slowing of the heart and arrhythmia, must be watched for.

Syncurine 8 cc. was given during surgery. It aids muscular relaxation and abolishes certain reflexes. It has no anesthetic action but reduces the total amount of anesthetic that has to be used. It is frequently used with nitrous oxide.

A cholecystectomy, excision of the gall bladder, was done. It was revealed that the gall bladder contained six choleliths, each approximately one inch in diameter. A culture was made from the removed organ and contained no growths.

The gall bladder is a pear-shaped sac from three to four inches long and one or more inches wide. It is situated on the under surface of the liver and is attached to it by areolar connective tissues. The wall of the gall bladder consists of four layers, a mucosal lining of columnar epithelium, a layer of smooth muscles, a third layer is connective tissue containing blood and lymphatic vessels, the outer surface, serous membrane.

The liver secretes approximately 500-800 cc. of bile per day. This is concentrated to approximately 100 cc. and stored in the gall bladder until it is needed in the small intestine to assist with digestion. In the gall bladder, bile contains 90% water, mucin, bile pigments, cholesterol, lecithin and inorganic salts. It is concentrated by the loss of water and the addition of mucin from the gall bladder wall. Waste products, as bile pigments, bilirubin, biliverdin — the green pigment of bile — are passed into the intestine and eliminated with the feces.

Cholelithiasis form due to infection or to the precipitation of bile constituents such as bile salts and cholesterol. Stones are most frequently seen in women or in the obese person, but may be found in either sex. The presence of stones usually means some dysfunction of the gall bladder. They give rise to symptoms for mechanical reasons and may cause obstruction of the cystic or common bile ducts and thereby cause jaundice.

To remove the gall bladder, an incision is made in the upper right abdominal wall, the cystic duct and blood vessels are divided and ligated and the organ is removed. In this case, a penrose drain was inserted; often this is placed near the stump of the cystic duct. This ensures that if leakage should occur the bile will escape from the wound through the drain rather than spread over the entire peritoneal cavity. When the danger of leakage is over, usually after five or six days, the drain is removed.

Mr. Hicks was taken from the operating room to the recovery room. Alternating intravenous glucose 5% solution in water and normal saline to the extent of 3,000 cc. was ordered and running when he was taken from the operating room. This aided in raising the blood pressure by increasing the blood volume. It also combatted dehydration and protected against carbohydrate depletion. His blood pressure dropped to 90/70, and oxygen per mask was given. Oxygen aids in raising blood pressure by retarding the blood entering the right atrium of the heart, thereby slowing circulation slightly and raising the blood pressure.

On return to his room, Mr. Hicks was placed in Fowler's position, which lessens temperature reaction and promotes free drainage from the incision. Deep breathing was encouraged to prevent any respiratory complication. He had a high abdominal incision, which would cause pain and muscular spasm during respiratory movements and it was very difficult, during his first few days after surgery, to get him to breathe deeply enough.

During the first day, he had periods of nausea, expectorating moderate amounts of green emesis that could be caused by the presence of bile in the stomach post-operatively. The next day the slight amount of emesis present was clear. While he was still drowsy from his anesthetic, emesis was present and good drainage was maintained to prevent the aspiration of vomitus. A quiet atmosphere and the sedatives ordered aided in suppressing emesis and thereby preventing any wound disruption. Demerol 100 mgm. was ordered as sedative.

During the evening, Mr. Hicks' respirations became shallow and his color appeared ashen. Oxygen was given per mask and respirations became fuller. Blood pressure, pulse and respirations were watched every four hours during the day. He was having quite severe spasmodic pains in his operative area, his temperature was 99.4°. The sedative order was changed to morphine gr. ¼ and relief was obtained.

Distention is almost always quite severe following biliary tract surgery. Despite efforts to get him to breathe deeply, to cough, aiding him to move slightly and thereby stimulate peristalsis, he did so only after very much urging and even then, very reluctantly. Repeated 1-2-3 enemas had to be given for relief of distention.

On June 26, the day after his operation, he was allowed to sit on the edge of his bed; the next day he was allowed to be up for a short period. Mr. Hicks was unable to void and had to be catheterized for two days post-operatively. Early ambulation appeared to give him relief. Frequent back and mouth care was given to provide comfort. A reddened, raised rash was noted on his arms, legs, and anterior chest. Caladryl lotion was applied for pruritis, with relief. The morphine was discontinued. Demerol was once again ordered, as needed, for discomfort. The rash and pruritis cleared within two days.

On June 27, Mr. Hicks complained of a sharp anterior to posterior chest pain, which became more severe on inspiration, his respirations became labored and temperature rose to 101.4°. Achromycin 250 mgm. was given at once, then four times a day thereafter. Achromycin is composed of tetracycline hydrochloride and is effective against a great number of Gram-positive and Gram-negative organisms. Therapy with this drug is usually carried on for two or three days after regression of symptoms. Milk was given with the tablets to aid in absorption and prevent irritation due to the high concentration of the drug in the intestinal tract. New symptoms may develop during therapy, therefore the patient must be watched carefully. For the next two days, Mr. Hicks had an intermittent temperature though chest discomfort became less severe. The achromycin was discontinued on July 2.

On return from the operating room, a moderate amount of serosanguinous drainage was noted on his dressings. These were changed as necessary to maintain asepsis. Draining wounds with pus or bile present need frequent dressings; bile has a very irritating effect on the skin and may cause pruritis. The penrose drain was moved out one inch per day starting June 27, and was totally removed on July 2. A dry dressing was kept over the incision, showing a small amount of serous drainage present. On July 5, 10 days post-operatively, the sutures were removed and a dry dressing applied.

After surgery, vomiting was quite persistent and nothing could be taken by mouth until it subsided, then sips of water were given. Intravenous fluids had been maintained to provide the tissues with fluid. A record of his fluid intake and output for 24 hours post-operatively was kept, noting a higher intake than output.

He was placed on a fluid diet for three days post-operatively. It was taken only fairly well. He was slightly jaundiced which would account for some of the anorexia. His appetite improved and he was changed to a soft diet. Six days post-operatively, he was placed on a full, fat-free diet.

After a cholecystectomy, jaundice may continue to show. It may indicate that a stone is obstructing one of the ducts or that bile is not forming and discharging properly. Slight jaundice usually clears in a very short time.

On July 5, 1954, Mr. Hicks was discharged — a much happier and calmer man. He appeared confident that he was on the road to better health.

In preparing this study, I learned the special points in the surgical nursing care of a cholecystectomy and the signs and symptoms to watch for in this specific condition. I learned and appreciated the value of the different diagnostic tests used and how these tests helped to differentiate between the two diseases — gastric ulcer and cholecystitis.

NURSING EDUCATION

Méthodes d'Enseignement en Sciences Physiques et Chimiques

SOEUR MARIE-ROSE LACROIX, S.G.M.

L'ENSEIGNEMENT DES SCIENCES, dans nos écoles d'infirmières demeure un cauchemar pour la plupart des institutrices, s'il faut en croire les conversations échangées avec les responsables particulièrement en ce qui concerne la physique et la chimie. Le présent article se propose d'apporter un peu de lumière en ce domaine.

NÉCESSITÉ DE CET ENSEIGNEMENT

La nécessité de l'enseignement de ces deux sciences à nos aspirantes infirmières est-elle encore à prouver? Devant la multiplication et la complexité croissante des appareils de toutes sortes en usage dans les hôpitaux, ne voit-on pas l'urgente responsabilité d'assurer à la jeune infirmière des notions au moins élémentaires de physique et une connaissance plus considérable, même assez élaborée de biochimie.

Pourquoi, objectera-t-on, inclure de la physique dans un programme déjà si chargé? Si la candidate a étudié cette matière pendant son cours primaire, je concède que l'école n'a pas à s'en préoccuper davantage. Ces notions antérieures n'ont certainement pas été adaptées aux besoins des infirmières, il faudra pourtant en tirer le meilleur parti possible.

L'institutrice en sciences appliquées: anatomie, physiologie et surtout en techniques s'efforcera de relier ses données actuelles aux principes préalablement étudiés en physique. Tout l'appareil de la locomotion s'éclaire par la théorie de l'inertie et des leviers. L'équilibre des forces expliquera la station debout et la marche. Des notions précises et assez étendues d'énergie et de calorimétrie sont indispensables à la compréhension du métabolisme et de ses variations. Les lois de la tension des gaz initieront à l'étude des phénomènes respiratoires et des échanges gazeux. Les connaissances sur les pressions osmotiques et hydrostatiques trouveront leur application dans l'étude de la circulation du sang et l'échange des fluides organiques. Ajoutons que les notions d'hydrostatique et de pression atmosphérique sont indispensables pour manier avec intelligence les manomètres, syphons, tubes de Lévine, etc. L'étudiante établira aussi facilement des rapports avec le pneumothorax. Elle comprendra plus facilement le danger des transports en avion des cas d'abcès appendiculaire. L'optique reçue s'appliquera aux appareils tels que microscope et autres instruments plus compliqués des salles d'examens de toutes sortes. Le développement de la science contemporaine exige l'ouverture en physique d'un chapitre sur l'électricité statique dans les salles d'opérations, sujet au moins aussi important pour les infirmières que pour les chirurgiens.

En un mot, la physique enseigne les principes de la plupart de appareils en usage dans les hôpitaux. Souvent, il arrive que l'infirmière doit

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ajuster un instrument en l'absence du médecin ou de l'interne. De plus, une compréhension parfaite du maniement d'un appareil inspire confiance de la part du patient qui sera établi ainsi dans un état de sécurité favorable à sa guérison.

Contrairement à la physique, la chimie doit toujours être enseignée aux infirmières étudiantes, indépendamment des notions reçues au cours primaire. Inutile de répéter ce qui a été dit maintes fois sur le rôle primordial de cette science par rapport à un grand nombre de matières au programme. Une étudiante, bénéficiaire d'un cours de chimie, adapté et bien compris avouait que la physiologie, la nutrition et l'hygiène ont été des matières très faciles pour elle; que la microbiologie, la pharmacologie et la pathologie furent grandement éclairées par ses notions de chimie, assimilées et bien appliquées.

Cette science est difficile à enseigner, objectera-t-on. Les institutrices, préparées pour donner cet enseignement sont rarissimes. Peut-être! Il faut maintenir cependant que la personne la mieux qualifiée pour donner ce cours demeure l'infirmière spécialisée "ad hoc."

Le programme d'études de nos écoles est trop chargé pour l'encombrer de détails inadéquats et inutiles. A nous de préciser les diverses matières enseignées et surtout les connaissances que comportent ces matières. Mentionnons donc immédiatement que toutes les notions de chimie doivent être orientées vers le nursing. Les heures étant limitées, il faudra s'astreindre au principal et encore une fois, l'adapter continuellement aux autres matières du programme et à la nouvelle vie pratique de l'étudiante. Un exemple illustrera cette affirmation. Les acides et les bases par exemple, seront enseignées en fonction de l'équilibre acido-basique de l'organisme, du pH humoral et du rôle des substances tampons. Les sels fourniront une occasion de parler de la valeur de leurs ions métalliques dans les contractions cardiaques et musculaires en général. L'étude de l'énergie, des calories et du métabolisme posera des jalons très utiles, voire même indispensables aux cours de nutrition de même qu'à ceux d'hygiène.

Ainsi, tout sera rapporté à l'enseignement connexe et concourra au développement scientifique intégral de l'infirmière.

Méthodes d'enseignement des sciences

Abordons maintenant la considération des meilleures méthodes à utiliser dans l'enseignement des sciences. Disons d'abord que cette formation scientifique doit ouvrir des perspectives sur la vie. Il faut moins s'arrêter sur les lois, les principes que sur la disposition psychologique à acquérir en présence de ces phénomènes. Si l'étudiante, au cours de ses études en sciences, a appris à reconnaître, attaquer et résoudre les problèmes, il est probable qu'elle pourra s'adapter plus facilement et plus efficacement que si elle n'avait pas reçu cette préparation. Cette possibilité d'établir le transfert des connaissances scientifiques aux divers problèmes de la vie courante gagnera l'intérêt des élèves et maintiendra l'enthousiasme dans un cours, réputé monotone et dépourvu de conclusions pratiques.

La classe est généralement conduite sous forme de causeries beaucoup plus que genre "conférences." Procéder du connu à l'inconnu est un axiome pédagogique qui a sa valeur dans toutes les branches. La population étudiante de nos écoles d'infirmières est constituée d'un groupement parfois homogène; mais bien souvent aussi, la culture antérieure est assez variable parmi les membres d'un même groupe. Il n'est pas rare de rencontrer dans une classe de probanistes, plusieurs étudiantes qui n'ont à peu près jamais étudié de chimie, par exemple. D'autres sont prêtes à renier leurs études primaires en sciences à cause de la limitation des notions qui leur sont restées. Le méthode socratique semble donc indiquée afin d'obtenir des réponses qui orienteront le maître dans la distribution des nouvelles connaissances à inculquer.

Cette méthode offre aussi l'avantage de forcer l'étudiante à participer aux cours. En effet, la discussion doit être encouragée le plus possible; à ce

niveau, le disciple doit posséder un bagage respectable d'idées et être capable de les exprimer librement. Il y aurait d'ailleurs intérêt à développer cette aptitude chez nos canadiennes-françaises.

Naturellement, il faudra veiller à maintenir l'ordre et la discipline toujours nécessaires en classe. Pour cela, le maître veillera à n'accorder la parole qu'à une seule personne à la fois; celle-ci en aura reçu l'invitation sous forme de question. Les élèves useront largement du privilège de poser des questions au professeur qui les accueillera avec patience et indulgence chaque fois qu'elles s'avéreront pertinentes et ressortiront du sujet enseigné. Les écarts et trop longues digressions devront être bannis afin de ne pas modifier le programme tracé.

Ces causeries devront s'illustrer de démonstrations de la part du professeur ou d'expériences réalisées par les élèves. Il va sans dire que l'enseignement des sciences se prévaut de toute l'aide visuelle possible. Ainsi, en physique, il est facile d'illustrer les effets de la pression atmosphérique au moyen d'un bidon de fer blanc duquel la vapeur d'eau a chassé l'air qu'il contenait. En optique, la loupe et le microscope serviront à de nombreuses démonstrations. Que d'appareils électriques simples pourraient être utilisés pour comprendre les nombreuses manifestations de ces fluides mystérieux que l'on nomme magnétisme et électricité.

En dépit de tous les abus et malgré ce qu'on a dit pour ou contre les manuels ils restent cependant un instrument accessoire, mais nécessaire pour l'acquisition des sciences. La difficulté consiste à choisir, parmi la profusion offerte sur les marchés, les mieux adaptés à notre curriculum.

La meilleure méthode à préconiser semble être les notes personnelles. L'étudiante s'efforce de recueillir assez de notes en classe afin de se créer une bonne charpente de la matière à assimiler; puis, pendant l'étude et à l'aide des livres de références trouvés à la bibliothèque, elle complète ses notes personnelles, en ayant soin de schématiser tous ses appareils, s'il s'agit de physique et d'illustrer les expériences de chimie par des dessins, s'il y a lieu. Elle traduira en équations chimiques les réactions qu'elle a rencontrées au cours de ses études ou au laboratoire.

Ces notes personnelles, rédigées avec soin, forment sans contredit l'instrument de travail idéal, le plus apte à procurer le développement intégral de l'esprit de l'étudiante.

Une méthode à préconiser est le *travail de groupes*. Le maître partage ses élèves en petits groupes, à chacun desquels il assigne un problème à résoudre, une investigation à poursuivre, un domaine à explorer, etc. Chaque groupement se choisit un chef chargé de diriger le travail, coordonner les efforts et compiler les résultats. La classe se réunit ensuite pour entendre les rapports des chefs de groupe. La discussion sera permise et on accordera assez de temps aux étudiantes qui veulent prendre des notes et conserver les connaissances acquises par ces procédés.

Le travail d'équipe ne diffère pas beaucoup du précédent. Il s'agit plutôt ici de partager la tâche au sujet d'une expérience compliquée à poursuivre ou d'une recherche quelconque et de mettre les résultats en commun.

Il y a aussi le plan de corrélation où l'on s'efforce de coordonner l'enseignement de plusieurs matières par la considération d'un aspect spécial étudié par plusieurs classes à la fois. Ainsi, les étudiantes de première année peuvent approfondir l'aspect social de l'hygiène publique tandis qu'au cours préliminaire on considère la nécessité d'un bon approvisionnement d'eau dans une localité. Dans ce cas, il faut viser à promouvoir l'intégration dans les esprits et non seulement sur le papier.

Les heures allouées aux études chez les infirmières ne permettent malheureusement pas de consacrer le temps nécessaire à la vérification des hypothèses, et les professeurs sont forcés de présenter le problème, suivi immédiatement de la solution avec vérification par la méthode expérimentale.

Matériel d'enseignement des sciences

Disons un mot maintenant du ma-

tériel nécessaire à l'enseignement des sciences. Un laboratoire de chimie, pourvu de tous les réactifs habituellement utilisés dans la poursuite du programme d'études actuellement proposé aux écoles d'infirmières est très recommandable. A défaut de laboratoire, il est facile de se monter un petit cabinet de chimie apte à servir aux principales démonstrations. Les cadres de ce travail ne permettent pas d'entrer dans les détails; disons cependant qu'il faut absolument illustrer par des démonstrations ou par des expériences individuelles, la théorie reçue en classe. Il va sans dire que les expériences réalisées par l'élève doivent être attentivement surveillées et contrôlées. La marche à suivre est remise à l'étudiante sur des feuilles préparées à l'avance; un espace blanc entre chaque procédé permettra à l'élève d'inscrire ses remarques et le résultat de son expérience. Quelques questions habilement rédigées stimuleront l'étude et la recherche personnelle.

La marche à suivre est toute indiquée dans le curriculum proposé par l'A.I.P.Q. Il renferme assez de détails pour permettre à l'Institutrice qui possède sa matière, de l'enseigner. Ajoutons simplement que la visite dirigée de musées scientifiques et de laboratoires pharmaceutiques peut être d'une grande efficacité.

Résultats visés par cet enseignement

La chimie est donc indispensable au programme des infirmières. Nous avons vu brièvement comment elle doit être enseignée. Considérons maintenant quels résultats on est en droit d'en attendre. Disons tout de suite que la culture scientifique doit concourir à la formation intégrale de la personnalité de l'infirmière, d'abord à cause de l'exactitude de ces données concrètes qui ne laisse aucune place à l'ignorance ou à l'incertitude. De plus, un enseignement raisonné des sciences force les étudiantes à réfléchir et à comprendre, pourvu que notre préoccupation porte sur le développement des qualités mentales autant que sur l'acquisition du savoir. Rien comme les sciences n'entraîne au sens de l'observation, à l'exactitude, à l'abstraction et à l'esprit de synthèse. Chez une professionnelle comme l'est l'infirmière, la culture scientifique doit suppléer l'humanisme des études secondaires. Cet effort doit tendre d'abord à dégager les valeurs culturelles de la formation technique, puis à ouvrir les intelligences sur des horizons plus vastes par lesquels sont rejointes les dimensions illimitées de l'humanisme intégral.

La formation scientifique favorise les possibilités d'affirmation et d'épanouissement de la personnalité, a-t-on dit, par l'acquisition des qualités de jugement, de décision et de justice. En effet, le laboratoire est une école de probité, car le mensonge, dans le domaine de la matière, est toujours sanctionné par un échec ou une catastrophe. C'est aussi une école d'humilité et de soumission au réel. Cette formation offre de multiples possibilités d'éducation de la sensibilité et de la maîtrise de soi, dans un milieu qui se rapproche de la vie. A la faveur d'un enseignement au fait des réalisations pratiques, s'amorce la réconciliation de l'esprit avec la main dans la manipulation d'une technique qui requiert toute l'acuité d'une intelligence attentive.

Si l'infirmière accepte de considérer l'hypothèse scientifique comme son problème personnel qu'elle s'engage à résoudre, les faits lui apparaîtront comme des événements humains, répondant à des exigences humaines. Pour finir, voici un paragraphe du Rév. Père A. Ravier qui résume tout ce qui pourrait être dit sur le sujet:

> La valeur morale du travail manuel, sa dignité et sa grandeur, les nécessaires patiences dans la recherche de la perfection de l'oeuvre . . . cet équilibre humain, cette conquête de la personnalité, qui s'instaurent peu à peu chez (l'aspirante-infirmière), lorsque ses sens, ses facultés, tout son être sont contraints à l'harmonie pour se concentrer sur un objet qui lui résiste . . . en un mot tout le prix du travail où la personne s'engage tout entière et de façon éminente donne à son effort un caractère sacré que seule la souffrance peut lui disputer.

Conclusion

L'enseignement des sciences dans

nos écoles d'infirmières est peut-être une entreprise difficile, mais il faut la poursuivre avec toute la ténacité et le dévouement désintéressé que l'appréhension de si beaux résultats mérite. Plus qu'une tâche, c'est un apostolat, et comme tel, il résulte "d'une sorte de surabondance, celle de la vie de la grâce, qui nous est toujours donnée sans mérite de notre part."

Drivers' Eyes - An Unsolved Puzzle

"Sorry, Officer. I just didn't see it."

Running past a red light — wrong way on a one-way street — making a prohibited left turn — passing in a no-passing zone — sideswiping another car's fender — why do these little driving mishaps occur? Why does a head-on collision occur?

The best traffic-management brains in the country are today probing for the causes of automobile accidents. Excessive speed, stupidity, irresponsibility, alcohol, all have been cited and all are doubtless to blame in one way or another. The key explanation has yet to be found.

But there is one thing the experts agree on — if a driver cannot see the road, the road signs, and the traffic distinctly and rapidly, he is a likely candidate for a smash-up, sooner or later. It's just commonsense that no driver is going to run head-on into trouble if he can see it coming. Seeing, in such a case, is actually foreseeing. Foreseeing gives a chance to avoid the accident.

There are car speeds, of course, at which no amount of seeing and foreseeing is of any avail. At a mile-a-minute, no pair of human eyes can do the seeing job that they can do at half-a-mile-a-minute. All that can be said in such cases is that if you are going to drive at 60 m.p.h. and up, you need the best pair of eyes that Nature, or a pair of properly fitted driving spectacles, can provide you with.

The problem of drivers' vision has never been successfully grappled with. Not even the capacity of the drivers' eyes has ever been accurately measured, for no means has been found for discovering how well the eye sees at high speeds. True, nearly all provinces apply an acuity test to applicants for licenses. That's fine — as long as you are sitting still to read the test card that remains in a fixed position. But you are not sitting still when doing 60 m.p.h. in your car, and the thing you are looking at is not in a fixed position. It may be another car approaching at 60 m.p.h.!

If it were possible for you to look at the eye chart instead of the approaching car under such conditions, the whole card would be an illegible blur. Yet you may have scored a triumphant 20/20 on it in the examiner's chair. This fact merely demonstrates that there is no way of measuring how well you see at high speeds. The only sure fact is that people who make a good score at the card test, with or without spectacles, will see better than others as auto drivers.

The speed with which we see can be measured in the case of reading — so many words per minute. But it cannot be measured in the case of the driver. And speed of seeing, along with clearness of seeing, is something on which life may depend.

There are other visual shortcomings that can imperil a driver's life. Among them are color blindness, faulty depth perception or poor judgment of distance, and "tunnel vision" or inability to see sidewise over any considerable range. And we may as well face the fact that little or nothing can be done to correct these three defects. The driver must learn to live with them by taking extra precautions. But it is highly important for him to know that he *has* such defects. Many people don't realize it. The surest way to find out is to have a thorough eyesight examination by a qualified specialist.

That same specialist can often provide glasses that will improve the driver's visual acuity at distances of 20 feet and over — the vitally important distances in safe driving.

Eventually, it is to be hoped that all localities will take the elementary step of requiring re-examination of drivers' vision every few years, for it is a fact that vision deteriorates with age. In the meantime, the obligation to provide himself with the best possible vision rests on the individual motorists.

— Better Vision Institute

If you knew how unreasonably sick people suffer from reasonable causes of distress, you would take more pains about all these things.—Johnson

Earning While Learning

ONE OF THE TRADITIONAL complaints about nursing education is directed at the economic obstacles placed in the way of many girls who would like to prepare as nurses — particularly at the university level. For promising students of insufficient means, scholarships are available, but it is doubtful if there are nearly enough of them.

It has long been hoped that some arrangements might be made which would provide those wishing to embark upon a university program with some assistance in realizing their desires. A period when the nurse may gain some financial assistance, would be a boon to many.

A constructive step would appear to have been taken by the University of Toronto School of Nursing. Those students who are registered for the basic degree program but who cannot finance four consecutive years at the University may now take advantage of an earning period at the half-way point. After the first year, which is a combination of cultural, scientific and clinical courses, these students may elect in the second year to complete their study of subjects necessary for the practice of nursing. Following this they enter into an eleven months' internship in Toronto hospitals where they practice and earn.

After writing registration examinations, they are eligible for registered nurse status. On returning to the University for the remaining two years, they complete requirements for Bachelor of Science in Nursing which allows them to nurse in both the hospital and public health fields.

It is to be hoped that the Toronto plan will suggest a similar pattern to other institutions. In the meantime, it may have done a little to dispel the illusion that someone must be trying to make it hard for young women to obtain a nursing education.

Preparing Students for CD

Canadians are often unjustly accused of apathy in certain fields, but there can be no denying the lack of interest and thought they have devoted to the subject of Civil Defence. Steps are currently being taken to ensure that the Canadian nursing profession cannot be accused of apathy in this respect.

Reading one or two hospital "Disaster Plan" manuals should convince even the most complacent that nurses must be better prepared to function effectively under emergency conditions. In recent years there have been repeated opportunities for nurses to understand and become skilful in the nursing of casualties, particularly those resulting from nuclear, biological, and chemical weapons. But a better way to ensure that nurses will have an adequate knowledge of these techniques, is to make it a part of teaching in all schools of nursing.

Giving additional impetus to this idea is a new program being launched this year by the Civil Defence Health Planning Group of the Department of National Health & Welfare. The Group plans to bring to the Civil Defence College at Arnprior, Ontario, directors of nursing education or senior instructors from all schools of nursing in Canada. Civil Defence planning and the technical aspects of the treatment and care of casualties will be discussed, with special emphasis on how this information may be integrated into the school's nursing curriculum. The first course took place at the end of June this year, with two others planned for early autumn and mid-winter.

Dusting off the Welcome Mat

One of the attractive features of a nursing career is the opportunity to travel, either on the job or in the process of changing assignments. For a nurse moving to a new area where she has no friends, however, travel may lack enjoyment unless brightened by an hospitable reception.

Usually, we can depend on a warm welcome from fellow nurses in other countries. Can they depend on us for an equally good reception? Each of us can contribute to the reputation of Canadian nursing abroad by providing a warm welcome for fellow nurses from across the seas. This will also contribute to the reputation of our Association as a body with impressive international affiliations.

A Quick Glimpse of Canada

Speaking about welcomes, a warm one was surely accorded recently to Miss Frances Rowe, Executive Secretary of the National Council of Nurses of Great Britain & Northern Ireland. Miss Rowe, here on a fellowship from the Commonwealth Fund in New York, visited both the U.S.A. and Canada.

Due to her limited time, it was only possible to plan visits to Toronto, Montreal and Ottawa, with a weekend in Sherbrooke, Quebec, where Miss Rowe was the guest of Miss Clara Aitkenhead, Director of Nursing, Sherbrooke Hospital.

While in Ottawa, Miss Rowe spent time in our National Office, and met with representatives of the Department of National Health & Welfare, Victorian Order of Nurses for Canada, Department of Labour and the Department of Health, City of Ottawa.

A blending of business with pleasure allowed for a visit to the Muskoka Lakes and to Niagara Falls.

We were pleased to welcome Miss Rowe to Canada and our discussions with her were helpful to both our countries as regards nursing on an international basis.

Canada Visits Abroad

August 29 to September 3, 1955, are the dates of the International Council of Nurses Board of Directors Meeting to be held in Istanbul.

Gladys Sharpe, president, CNA, and Pearl Stiver, general secretary, will be attending. An important item

Miss Rowe & Miss H. Lamont at Royal Victoria Hospital, Montreal

of discussion will be the ICN Eleventh Quadrennial Congress to be held in Italy in 1957.

A visit to the World Health Organization in Geneva will enable our representatives to meet with Miss Lyle Creelman, Chief, Nursing Section, W.H.O., and with other members of the World Health "team."

Then on to Great Britain where the National Council of Nurses for Great Britain & Northern Ireland will be visited. Quite an itinerary for a two weeks' visit!

Canada's opportunity to contribute to, and to gain knowledge of the nursing world scene is assured when it is possible for our representatives to be present.

Bon Voyage — Miss Sharpe and Miss Stiver.

World Mental Health Meeting

"Family Mental Health and the State" will be the theme of the Annual Meeting of the World Federation of Mental Health which meets in Turkey, from August 21 to 27, 1955.

CNA members who may be fortunate enough to be travelling in Eastern Europe at that time are welcome to attend the sessions. Further details may be obtained from: The secretary-General, World Federation for Mental Health, 19 Manchester Street, London W1, England.

The languages used will be Turkish, French and English. Simultaneous interpretation will be supplied for the principal meetings and for group discussions where required.

Is there a Better Way?

All areas of nursing feel the same need and share the same concern about the improvement of nursing service. The most effective utilization of nursing personnel demands good administrative policies and procedures in all areas and levels of nursing service administration.

The Third Report of the W.H.O. Expert Committee on Nursing dealing with the problems of nursing service administration offers the following assistance: Defines nursing service and discusses its present stage of development. Stresses the importance of sound planning in administration. Outlines the steps in making, executing and evaluating a plan for solving a problem. Discusses some principles of administration and suggests the preparation necessary for nursing service administration.

This publication is part of the World Health Organization's Technical Report Series No. 91 which may be obtained from the Ryerson Press, 299 Queen Street West, Toronto 5, or Periodica, 5112 Avenue Papineau, Montreal 34.

Le Nursing à travers le pays

S.O.S. — — S.O.S. — —

S.O.S. est ordinairement le signe de détresse des navires en péril; aujourd'hui, en tête de ces notes, il signifie: Sérieux oubli de Suzanne. Oui, oubli du texte que j'avais à traduire, dans une des écoles d'infirmières visitées au cours de la semaine. Espérant avoir le temps de faire cette traduction en cours de route, j'ai glissé mon texte dans une enveloppe de papier brun puis, dans mon sac de voyage, pour ensuite la laisser en route.

Je fais donc à mes lectrices mes plus humbles excuses; je profiterai toutefois de cette occasion fortuite pour parler du travail qui s'accomplit dans la province de Québec en fait de nursing.

Statistiques

Les infirmières dans la province de Québec sont au nombre de 9,369 (membres pratiquants); les étudiantes, de 4,038.

L'Association des Infirmières de la Province de Québec a certifié 35 écoles d'infirmières, de Gaspé à Hull et de Chicoutimi à Noranda. Elle a approuvé, en plus, quatre écoles d'auxiliaires en nursing dans lesquelles se poursuit le programme recommandé par l'Association des Infirmières Canadiennes.

Recrutement

Les familles nombreuses du Canada français nous permettent de faire un recrutement intense et d'envisager l'avenir avec confiance. En mai dernier, le Comité de Recrutement a organisé à Montréal une exposition qui fut un succès. Plus de mille jeunes filles des écoles supérieures de la Commission scolaire de Montréal visitèrent les différents kiosques illustrant les phases de la vie de l'étudiante et les carrières offertes aux infirmières. Nous ne savons pas ce qu'il fallait admirer le plus: l'effort concerté des écoles d'infirmières, la collaboration bienveillante de la Commission scolaire, l'imagination et le sens artistique dont a fait preuve l'illustration du thème adopté par chaque kiosque, ou le dévouement des jeunes infirmières organisatrices de cette démonstration.

Défense Civile

Deux hôpitaux de notre province: l'Hôpital Notre-Dame à Montréal et l'Hôpital du Christ-Roi à Nicolet ont complété dernièrement l'organisation de leur hôpital en cas de désastre. Cette préparation, poussée jusqu'au moindre détail, a donné comme avantages immédiats une évaluation complète de leurs ressources — personnel, matériel, etc. et la constatation, une fois de plus, de l'interdépendance des services hospitaliers. Administrateurs, médecins et infirmières furent invités de toutes les parties de la province à venir étudier, pendant deux jours, cette organisation. Des suggestions intéressantes et pratiques furent faites, entre autres, le projet d'un cours en français sur la défense civile, pour les directrices du nursing et les institutrices. Les initiateurs de ce mouvement méritent nos félicitations.

Journée d'Etude

Les infirmières, se rendant compte de l'évolution rapide de la médecine dans certains domaines, ont organisé dans leurs districts respectifs des journées d'étude. Cette année, j'ai eu le plaisir d'assister à la séance du district no XI (Montréal) laquelle portait sur "le coeur." La science du coeur nous fut exposée en trois parties: l'âge anatomique, celui des découvertes de la circulation, etc., l'âge du stéthoscope et enfin l'âge moderne de la chirurgie cardiaque. Cet exposé, suivi d'un questionnaire, a contribué à remettre à la page un grand nombre de nos infirmières.

Mission française en Amérique

Notre position de seule province française dans les Amériques nous amène parfois à jouer un rôle particulier et utile. Durant la guerre, notre connaissance de l'anglais et notre parler normand faisaient de nos soldats des parachutistes de choix avant l'invasion. Aujourd'hui, toujours à cause de notre langue, nous recevons des infirmières des pays éloignés où le français est parlé, soit pour des visites d'observations ou pour des études spéciales; en d'autres mots, pour apprendre le nursing américain en français, il faut venir dans notre province. Qu'elles viennent d'Haïti, du Laos ou du Viet Nam Sud, toutes sont chez nous les bienvenues et nous espérons que leur séjour leur aura bénéficié et qu'elles en apporteront un bon souvenir; quant à nous nous n'oublierons jamais leur courage devant le froid, leur générosité et leur bonne volonté; notre amitié formule les meilleurs voeux à leur endroit.

La Journée des Hôpitaux

Le 12 mai, tous les hôpitaux ouvraient leurs portes au grand public. "Jeanne Mance, première infirmière laïque," et "le dévouement de l'infirmière" furent les thèmes mis en évidence, selon la recommandation des évêques.

Histoire du Nursing

Un film sur Florence Nightingale a été préparé par la Compagnie d'Assurance-Vie Metropolitaine, à la demande de l'Association des Infirmières Canadiennes, film silencieux, avec texte en français. La Compagnie a mis gracieusement à la disposition de l'Association des Infirmières de la Province de Québec cinq bobines et des textes que nous mettons, à notre tour, à la disposition de nos écoles d'infirmières ainsi que des écoles supérieures de jeunes filles. Nous sommes très reconnaissantes à la Métropolitaine de cette nouvelle marque d'appréciation; déjà, nous lui devons un programme de radio qui marque, chaque année, le début de notre campagne de recrutement.

Aux institutrices qui enseignent l'histoire du Nursing, je m'en voudrais de ne pas signaler les belles leçons qui se dégagent

d'un "fragment de texte sur sainte Elisabeth de Hongrie" dans Edith Stein — édition du Seuil — ce sont des lignes traçant de la sainte un portrait noble et humain.

Saviez-vous que dans les trésors de nos hôpitaux il se trouve, à l'Hôtel-Dieu de Québec, une lettre écrite de la main de saint Vincent de Paul; a-t-elle été adressée directement aux Mères fondatrices ou a-t-elle passé des mains de la Duchesse d'Aiguillon dont st. Vincent était le directeur, au monastère, nous ne le savons pas mais nous laissons à quelques doctes Mères le soin de nous renseigner.

Congrès

Parlons d'abord de celui de l'Association des Infirmières Canadiennes qui aura lieu à Winnipeg du 25 au 29 juin 1956; les préparatifs vont bon train: convoi spécial, programme récréatif, en route, excursion dans les Rocheuses, au pays du soleil de minuit, la côte du Pacifique, en somme, un congrès dans le milieu solennel de l'Université du Manitoba suivi de vacances dans un décor merveilleux.

La présidente de l'A.I.C., Mlle Gladys Sharpe, et la secrétaire, Mlle Pearl Stiver se rendront prochainement à Istamboul, pour discuter avec les membres du Conseil International des Infirmières le programme du Congrès International qui se tiendra à Rome en 1957. Nous leur souhaitons un bon voyage et à vous, la fidélité dans vos résolutions d'économie que vous ne manquerez pas de prendre en vue de réaliser ce rêve d'un beau voyage!

In Memoriam

Annie Ethel (Denison) Aust, a graduate of the Lady Stanley Institute, Ottawa, died suddenly on April 4, 1955.

* * *

Hilda Bartsch, who graduated from The Montreal General Hospital in 1931, died on May 9, 1955. Miss Bartsch was appointed executive secretary and registrar of the New Brunswick Association of Registered Nurses in July, 1954. Previously she had had a distinguished career as director of nursing in several New Brunswick hospitals including the Carleton County Hospital in St. Stephen and the Victoria Public Hospital in Fredericton. She had also ably served as instructor at the Alexandra Hospital, Montreal, and at the General Hospital in Vancouver. Miss Bartsch was president of the N.B.A.R.N. during the biennium 1948-50.

HILDA M. BARTSCH

* * *

Maybelle (May) Campbell, who graduated from Women's College Hospital, Toronto, in 1926, died at Toronto on April 20, 1955.

* * *

Fannie Sarah Dalzell, a native of New Brunswick who graduated from City Hospital, Worcester, Mass., in 1911, died recently following a brief illness. Miss Dalzell had lived at Castalia, N.B., since her retirement in 1954.

* * *

Melba Rae (Devine) Elworthy, who graduated from the General Hospital, Yarmouth, N.S., in 1931, died at Montreal on April 17, 1955, at the age of 45. Mrs. Elworthy worked with Victorian Order of Nurses for a time and, prior to her marriage, was a staff nurse at Grace Dart Hospital, Montreal.

* * *

Annie Welton Foster, who graduated from Victoria General Hospital, Halifax, in 1926, died on April 9, 1955, after an illness of two weeks. Very shortly after she graduated, Miss Foster was appointed superintendent of Western Kings Memorial Hospital, Berwick, N.S. She filled this post until the time of her death, taking leave of absence for military service during World War II. In 1939 she enlisted in the R.C.A.M.C. and served overseas with No. 15

and No. 9 C.G.H., later becoming matron of No. 19 General. She was active in nursing associations and was a member of the Halifax Unit of the Nursing Sisters' Association.

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Emily Jane Grinyer, who graduated from Hamilton General Hospital in 1913, died on April 1, 1955. Miss Grinyer had engaged in Private nursing until her retirement in 1949.

* * *

Ella Lowe, who graduated in Chicago many years ago, died at Orillia, Ont., on April 23, 1955, in her 90th year. Miss Lowe was on the staff at Soldiers' Memorial Hospital, Orillia, at one time.

* * *

Jean MacLean, a graduate of Toronto General Hospital, died at Halifax on May 4, 1955, in her 55th year. Following graduation Miss MacLean, who had taught public school for many years, secured her certificate in teaching from the University of Toronto School of Nursing, completing the work for her degree in nursing later at the McGill School for Graduate Nurses. She spent many years at T.G.H. as a head nurse, supervisor, then clinical instructor before enlisting in the R.C.A.M.C. in 1943. Following her discharge she became supervisor of Red Cross outpost hospitals in Nova Scotia. More recently she organized and directed the School for Nursing Assistants at Camp Hill (D.V.A.) Hospital in Halifax. Illness caused her retirement last autumn.

* * *

Sarah C. MacRae, a graduate of Calgary General Hospital, died recently at Calgary. She had held supervisory positions at the Calgary and Regina General Hospitals before enlisting with the R.C.A.M.C.

JEAN MACLEAN

in 1940. She served overseas with No. 8 Canadian General Hospital. Following her discharge, Miss MacRae had been in charge of the D.V.A. Convalescent Hospital in Calgary.

* * *

Marion, Ogilvie, who graduated from the Royal Victoria Hospital, Montreal, in 1926, died at Victoria, B.C., on March 21, 1955.

* * *

Margaret (Henderson) Reid, a graduate of Memorial Hospital School of Nursing, died at Niagara Falls on April 27, 1955. For several years Mrs. Reid had served in that city as school nurse.

* * *

Florence Mary Thomson, who graduated in 1905 from Mount Sinai Hospital, New York, died recently at Montreal. For more than 45 years she had engaged in private nursing in Montreal.

* * *

Mattie Thompson, a graduate of Englehart Hospital, Toronto, died at Bethany, Ont., on April 9, 1955.

Baby's First Breath

The crucial moment of childbirth for many mothers is the instant when the baby utters its first cry. But, for the infant itself, the crucial moment comes a few seconds earlier, when it draws its first breath — without which the cry could not be uttered. What hapens when the first breath is drawn has recently been demonstrated dramatically by a Swedish scientist, who made x-ray motion pictures of the process. Just after birth, the film showed, the infant's heart is enlarged. When the ribcage expands and air is drawn into the lungs, the heart shrinks, its content of blood drawn into the inflated lungs. When the lungs empty — perhaps to the accompaniment of the cry for which the mother is listening — the heart increases in size as normal blood flow begins. Thereafter, both the heart and lungs operate rhythmically and life has begun. — ISPS

Heaven never helps the man who will not act.—SOPHOCLES

Sélection

A Propos de Poliomyélite

"L'apparition d'épidémie demeure un mystère. Il y a quelque chose de plus, lors de l'éclosion d'une épidémie, que la simple coexistence, en un lieu donné, du virus poliomyélitique et des éléments réceptifs de la population. Nous sommes ainsi réduits à formuler des hypothèses.

"L'étude de certaines épidémies éclatant dans des communautés isolées a souligné l'importance de la contagion directe assurant la transmission d'un porteur de germes à un sujet sensible, et l'influence des infections antérieures, en particulier de la coqueluche. Même dans ces conditions, il reste à expliquer les différences de susceptibilité qui se manifestent d'un individu à l'autre, cela dans des conditions où les chances de contamination ont été équivalentes. On peut mettre en cause des facteurs génétiques de susceptibilité, des facteurs endocriniens concernant la résistance à l'infection, des facteurs physiologiques divers (surmenage, fatigue), les traumatismes ou les injections irritantes. Mais une place importante doit être attribuée à l'inaptitude à immunisation générale présentée par certains sujets. Parmi une population, ceux qui deviennent malades sont ceux qui sont moins aptes que les autres à s'immuniser contre l'infection, à former et à conserver des anticorps.

"Le nombre de cas paralytiques, dans une épidémie donnée, dépend de la proportion existant entre les individus ayant déjà un certain niveau d'immunité résultant d'atteintes antérieures et ceux qui n'ont aucune immunité. Quand la poliomyélite s'abat sur une région isolée, elle devient une maladie extrêmement contagieuse qui gagne rapidement chaque individu."

La conclusion de cet exposé est intéressante:

"Les pays de civilisation évoluée, qui ont autrefois connu une immunité étendue à toute la population, analogue à celle qui persiste dans les pays sous-développés, s'acheminent progressivement vers un état de sensibilité comparable à celui des populations isolées. Ceci résulte de l'établissement de l'immunité spontanée à un âge de plus en plus avancé et du fait qu'une proportion croissante de la population atteint maintenant l'âge adulte sans avoir eu l'occasion de s'immuniser ou sans avoir pu entretenir son immunité par des réinfections latentes devenues de plus en plus rares.

"Il devient également évident, qu'au fur et à mesure de l'amélioration du niveau de vie dans les pays arriérés, l'incidence de la poliomyélite paralytique augmentera, à moins que l'on ne découvre un procédé d'immunisation active contre l'infection."

Le Dr. Payne, de la section d'Epidémiologie de l'O.M.S., a montré, au cours d'un très intéressant rapport, qu'il y a une *relation entre l'augmentation du nombre de cas de poliomyélite et la diminution de la mortalité infantile.* Les deux courbes, l'une ascendante et l'autre descendante, se rencontrent en un point qui est sensiblement le même dans tous les pays.

Cette constatation est facile à comprendre. L'amélioration des conditions sanitaires générales et de l'hygiène des populations est un des facteurs essentiels de la lutte contre la mortalité infantile. Le taux plus ou moins bas de la mortalité des enfants du premier âge, peut être considéré comme un témoin des progrès réalisés dans ce domaine.

Dans le pays où la mortalité infantile est très élevée, les conditions d'hygiène sont telles que les enfants font pratiquement tous une poliomyélite-infection dans les premiers mois de la vie et deviennent dès lors, immuns contre la maladie.

Au contraire, dans les pays qui possèdent un niveau élevé au point de vue sanitaire, les enfants ne s'immunisent pas ou s'immunisent plus tard et courent, dès lors, un risque plus grand d'être atteints de la poliomyélite-maladie.

Le problème consiste donc, comme l'ont dit les rapporteurs, à remplacer, par une méthode d'immunisation active, l'immunisation spontanée naturelle qui protège les populations sous-développées au point de vue de l'hygiène.

— La troisième Conférence Internationale de la Poliomyélite.
Dr. P. Recht—*L'Enfant —Oeuvre Nationale de l'Enfance,* Bruxelles.

Book Reviews

The Johns Hopkins Hospital School of Nursing, by Ethel Johns and Blanche Pfefferkorn. 416 pages. Burns & MacEachern, 12 Grenville St., Toronto 2, Ont. 1954. Price $5.00.

Reviewed by Salomea Tretiak, Director of Education, General Hospital, Winnipeg, Man.

Two well-known nursing leaders have written the history of an outstanding pioneer hospital school of nursing.

In Part One, Miss Johns takes us through the years 1869-1907. This is an era of marked progress in the fields of medicine, public health and science. The history of the hospital and the school is written into the lives of the men and women who were instrumental in its inception and development. We see the influence of Florence Nightingale and her associate, Florence S. Lees. We see the constancy of purpose to provide a high quality of nursing service built upon education for skilled care of the sick. Through use of documentation and Miss Johns' interpretations we are treated to enriching glimpses of the greats who "not only made history — they also wrote it." Isabel Hampton, Lavinia Dock, Adelaide Nutting, Doctors Osler, Welch, Halstead and Kelly live again before us.

Part Two deals with the period from 1907 to 1949. Miss Pfefferkorn takes us through the years of rapid development in education, health and social work. World War I, the influenza epidemic, the depression and on its heels World War II, all take the centre of the stage in turn. The school is piloted through these crises by Georgina Ross, Elsie Lawler and Anna D. Wolf. We see their hopes and their vision; their courage amid hardships and disappointments. Through all these years the school maintains its purpose of education for service.

The book also contains studies of special aspects of the school. These cover the library, nursing in the community, life in the school, the work of the Endowment Fund Committee, and the Johns Hopkins Hospital Nurses' Alumnae Association.

Exhaustive research, understanding, insight and skill have produced a meaningful setting for the unfolding of the history of the school in the social framework of the country. It mirrors the struggles of a hospital school of nursing. For this reason nurse educators and those interested in nursing should find the book well worth reading.

The Child, His Parents and the Nurse, by Florence G. Blake, R.N., M.A. 440 pages. J. B. Lippincott Co., 2083 Guy St., Montreal 25. 1954. Price $5.00.

Reviewed by Sister Miriam, Clinical Instructor in Obstetrics, St. Mary's Hospital, Montreal.

A generous grant made available by the Kellogg Foundation for the development of an advanced course in "Nursing Care of Children," enabled the author to do research work in this particular field. In her introduction, the author stresses the importance of developing in the student the qualities most essential to the art of nursing.

This comprehensive study is written primarily for those interested in the newer trends of nursing. It presents excerpts from many sources, including areas of psychiatry, growth and development, and the social sciences. The questions found at the end of each chapter are an excellent guide for clinical instructors and should prove of sound educational value to the students by promoting their activity and participation. Suggested readings are also listed at the end of each chapter.

The material is divided into age groups for the purpose of clarity and organization. Each phase of development continues into the next period and becomes fused with it. Chapters two and three are of particular interest to those concerned with obstetrical nursing.

I feel sure that this book will be most beneficial in developing a helpful cooperation between the child, his parents and the nurse, thereby fulfilling the author's purpose.

Microbes and You, by Stanley E. Wedberg, Ph.D. 439 pages. The Macmillan Co. of Canada Ltd., 70 Bond St., Toronto, Ont. 1954. Price $4.50.

Reviewed by Yvonne Mogen, Assistant Director of Nursing and Educational Director, General Hospital, Medicine Hat, Alta.

Students in courses in microbiology frequently enrol as complete novices as to the whys and wherefores of the bacterial world.

To incorporate into the curriculum the rudimentary aspects of bacteriology, the principles evolved from research and study, and the applications pertinent to our work, presents a challenge to the instructor who is limited by time. That the author has understood this problem is indicated in his preface when he states that the book "has been written as a text for an introductory, terminal, survey course in microbiology for students with little or no background in science." He has succeeded in providing much more than background material. Of the 23 chapters, 16 are devoted to general considerations of bacteria, incorporating practical, everyday applications useful to nursing practice. Enough detailed explanation has been provided to insure basic knowledge of the various relationships of microbes to man.

The style adopted by the author emanates interest from the beginning. The introduction provides pertinent facts relative to the influence of scientific progress on the life span. Such chapter headings as "Microbes Must Eat" and "Polluted Waters Can Kill You" indicate the author's ability to capture the eye — a prerequisite to gaining attention.

"Microbes and You" serves a useful role for the instructor in presenting and supplementing her lectures, and for the student who feels the disadvantage of her position as a newcomer to the realm of bacteriological study.

English Comprehension Pieces, for Nurses and Hospital Technicians, by Leonard B. Harrop, M.A., Fellow of the Institute of Linguists. 44 pages. Published by the Author, McGill University, Montreal.

Reviewed by Mrs. Vernon Bolger, Science Instructor, Charlottetown Hospital, Charlottetown, P.E.I.

In his book Professor Harrop has taken selections from medical and nursing literature to illustrate the study of words in context. He has assigned the learner the task of supplying the synonyms and antonyms of these words. In addition to individual words, attention is given to idiomatic expressions which the student is directed to use in sentence construction. A number of questions on each selection, designed to improve comprehension skill, are included in each assignment.

The excerpts from the writings on medicine and nursing are well chosen to give authoritative information and to interest the student in doing further reading on the same topic. The assignments serve the two-fold purpose of building a larger vocabulary and of improving comprehension skill.

Dr. Harrop wrote this book especially for non-English-speaking students, but it could be used to advantage by every Canadian student. Many students of nursing complain of the difficulty of understanding so many new terms — it is like learning a new language. It helps a great deal to have these words used in context. I would like to see Professor Harrop do another series with more sampling of scientific terms.

The Nursing Couple, by Merell P. Middlemore, M.D. 195 pages. British Book Service (Canada) Ltd., Kingswood House, 1068 Broadview Ave., Toronto 6, Ont. 2nd Ed., 1953. Price $1.50.

Reviewed by Miss Christine E. Charter, Victorian Order of Nurses, Vancouver, B.C.

This little book, with such an intriguing title, is said to represent the first serious attempt made by a qualified psychoanalyst to study the psychic "sucking situation" between mother and infant.

The main thesis which Dr. Middlemore presents is that mother and baby could secure a happier and more profitable adaptation to each other, if, in place of the traditional rigid methods, the mother could use, under skilled guidance, a flexible technique for breast feeding which would take full account of the psychological as well as the physical needs of herself and her baby. Strong support is given to the theory that what happens to the baby at the breast can affect it all through life, and that the factors of activity, passivity and mental stress set up by frustration at the time of nursing are of paramount importance in the development of character. Dr. Middlemore's observations, made in the obstetrical wards of a general hospital in England, are concerned, therefore, with the physical and emotional difficulties experienced by the mother and infant in establishing satisfactory breast feeding and are included under such chapter topics as: Routine and Standard Nursing Technique, Satisfied and Unsatisfied Sucklings, The Mother's Emotional Attitude, Principles on Which Technique Might be Modified.

First published in 1941, it is unfortunate that the author did not live to revise the

work herself in the light of current trends in this area, but the inferences she draws from her observations at that time seem objective and sound, yet show a kind appreciation of difficulties encountered. This is a book which should help doctors and nurses to realize that the mutual adaptation of mother and baby may be advanced by sympathetic nursing and delayed by "misguided interference." It could also be read profitably by intelligent mothers.

No Thought for Tomorrow — The Story of a Northern Nurse, by Cecilia Jowett, R.N. 104 pages. The Ryerson Press, 299 Queen St. W., Toronto 2B, Ont. 1954. Price $2.75.

Reviewed by Lillian MacKenzie, Director, Public Health Nursing, Winnipeg Health Dept.

From her cabin home in Northern Ontario Miss Jowett has written this moving and inspiring account of the strange and full years of her life. A victim of circumstances which placed her in an orphanage at the age of three and brought her to Canada from England at five with an identification ticket pinned to her coat, Miss Jowett's story reveals how through tireless energy, grim determination, and the early influence of Dr. Bernardo's care, she was able to overcome all obstacles and accomplish her childish resolve to make a place for herself in the world by helping others.

Following graduation from the Orillia General Hospital, Miss Jowett was able to realize her ambition to become a missionary nurse when she offered her services to the settlers in a tiny rural community.

The first 11 chapters bring us into intimate contact with these hardy Northern Ontario settlers. Miss Jowett's descriptions of this settlement, its people, and her seven years' experience are so vivid and real that one can readily imagine oneself sitting in her humble cabin or accompanying her in winter and summer as she answers the call "Missus Nurse, you come, pliz."

Miss Jowett's second resolution — to return to England in search of her family — was made possible by a small legacy from a grateful patient. In chapters 12 to 16 her description of the preparation for the journey, and the humorous and pathetic incidents throughout the trip leave the reader full of compassion and admiration. Her true purpose in life brought her back to Canada. In the final chapter of her book we find her established in a cabin on Lake Couchiching ministering to the needs of her Indian friends of the Rama reservation. Throughout the pages of her book, Miss Jowett's life story exemplifies the joy of achievement, and the dignity of service.

In the Good Old Days

(*The Canadian Nurse* — JULY, 1915)

"I have a feeling that there is a tendency among us, in this day of standards and efficiency in our training schools, to talk of the *science* of nursing, forgetting that along with science there must be *soul*."

* * *

"Medical inspection of school children has produced many striking examples of the results of attention to carious teeth and the removal of diseased tonsils and adenoids. There was a rapid improvement of general nutrition, a quickened intelligence and a readier application to school work with a marked improvement of school progress."

* * *

"It is only recently that the experiments for finding the level of blood pressure have been used in clinical medicine. The first study of blood pressure in man was made in Vienna in 1876. Before that time doctors paid more attention to pulse and skin. Even today some doctors claim that the pressure can be judged by the finger as well as by an instrument."

Victorian Order of Nurses

The following are staff changes in the Victorian Order of Nurses for Canada:

Appointments — Calgary: *Nellie Fisher-Davies* (Royal Free Hosp., Ireland). Ottawa: *Margaret Godin* (St. Michael's Hosp., Toronto). Pictou: *Mrs. Anne Smith* (St. Martha's Hosp., Antigonish, N.S.). Saint John, N.B.: *Lorraine MacKay* (St. J. Gen. Hosp., N.B.). Toronto: *Mrs. Shirley Querney* (Victoria Hosp., London); *Mrs. Ruth Sharpe* (Tor. West. Hosp.). Winnipeg: *Shirley Mansbridge* (Grace Hosp., Winnipeg). Woodstock: *Mrs. Muriel Likens.*

From Small Beginnings

A fascinating old book was loaned to us recently by the Director-in-Chief of the Victorian Order of Nurses for Canada, Miss Christine Livingston. It was the verbatim report of the Jubilee Congress of District Nursing, held at Liverpool, England, 50 years after Mr. William Rathbone had launched the very first such program in that city.

The Congress was attended by numerous titled folk including Lady Aberdeen who sparked the development of the Victorian Order in 1897. Representatives from many countries reported on the growth of bedside nursing in the homes, on pensions for nurses, and the comparative newcomer in the public health field, school nursing.

Students in public health nursing courses would love to have a chance to pore through these pages. Miss Amy Hughes, general superintendent of the Queen Victoria Jubilee Institute read a paper on the "History of District Nursing in England and Other Countries" that is a gem so far as source material is concerned. Because Mr. William Rathbone, the founder of district nursing, found it impossible to secure qualified nurses, in 1862 he generously made it possible for the Royal Infirmary, Liverpool, to start a training school along the lines of the one Miss Nightingale had started to "supply nurses not only for the Infirmary itself but also for the poor in their own homes and for private patients." Despite the fact the district nursing was planned originally to provide care for the poor, "from the very first, Mr. Rathbone foresaw the dangers of indiscriminate sick relief; the nurses . . . were urged to avoid the evil of pauperising the patients."

An interesting emphasis was reflected in the report read on the work of the Henry Street Settlement in New York. "Nursing the sick in their homes should be done seriously and adequately, instruction being incidental to it and not the primary motive."

School nursing evolved from district nursing when, in 1892, a Queen's Nurse visited a school in London at the request of the school board. "The idea originated during the enquiry into the feeding of school children in 1891-92, when it was discovered that unnecessary suffering was inflicted on the children by the neglect of minor ailments such as broken chilblains, etc." The nurse's skill produced such beneficial results so far as attendance was concerned that by 1904 the London County Council had appointed a large staff of school nurses. The salaries ranged from 75 to 100 pounds a year.

In the light of present-day developments the following excerpt from an address descriptive of an active school nursing program shows what a poor prophet the speaker was: "I am afraid the days of the school nurse are numbered (Cries of 'no, no'), because I am afraid there is an influence at work which is against her . . . In working or manufacturing towns, the life of a medical man is very hard and difficult, and his earnings are very small. The fee he can charge is, in many cases, only a shilling. It may be that doctors in such a town may resent a nurse giving dressings and doing this work for 89,000 children in five years, representing 89,000 shillings out of medical men's pockets."

A question that is still of burning interest to nurses received considerable attention and discussion — pensions. Space does not permit the reproduction of the principal address but some of the comments are still very pertinent, some amusing:

"A nurse cannot commence to work for herself until much later in life than the ordinary working woman . . . she is 27 or 28 before she is qualified to work on her own account — before she is able to earn anything beyond the most trifling sum together with her board, lodging and professional clothing.

"Her working life is short. The age at which a nurse must be prepared to cease work is not absolute but experience . . . shows that most nurses fail to obtain regular employment after the age of 45 and that very few can earn a livelihood at 50. I am, of course, dealing with the rank and file — the 'Tommy Atkins' of the profession.

"There is another consideration which has a most important bearing on the subject, that is, the vitality of nurses. It is higher than that of the average woman. The nurse lives longer than the Government annuitant — the longest lived person in the country! Thus there is a longer period to bridge over between the inability to obtain work and death."

A contributory pension scheme was in operation to which, even in 1909, a great

many hospitals and many district nursing associations belonged. Then, as now, the provision of pensions for those in private nursing presented a problem.

Liver Microsomes

Special mechanisms by which the body destroys drugs and other "foreign" compounds have been discovered, revealing that the body has systems of "counter agents" that attack and inactivate drugs. The counter agents are contained in little-studied liver microsomes — tiny particles of the body's cells too small to be seen even with a microscope. This discovery stems from research into the fate of drugs in the body being conducted by the U.S. Public Health Service's National Heart Institute. Knowledge of these mechanisms will be valuable in the designing of better drugs for specific action in the body.

Before the discovery of this function of liver microsomes, it was assumed that drugs were inactivated by becoming "enmeshed" in biochemical mechanisms which did not distinguish between drugs or other foreign compounds and substances used in the body's normal economy. The new finding establishes the existence of chemical systems which seem to work solely to limit the action of intruding foreign substances and which may have no function in the handling of substances that the body uses for nutritional purposes.

The events which led to this discovery began at the Heart Institute some time ago with the study of a then new compound called SKF 525-A. This compound, which lacks any activity of its own, was known to possess a remarkable ability to prolong or "potentiate" the effects of other drugs in the body. Rats, for example, slept ten times as long with a barbiturate when its use was accompanied by SKF 525-A than without it. This potentiating effect was seen not only with barbiturates but also with an unrelated variety of compounds — narcotics, muscle relaxing drugs, and even stimulants.

That SKF 525-A could slow the breakdown of such unrelated compounds was surprising and interesting to Heart Institute investigators. It suggested the possible existence of a common denominator which ties together in some way all of the body's different pathways of drug breakdown and makes them all open to the action of SKF 525-A. This common denominator was the liver microsome which was found to contain nearly all of the enzyme systems responsible for drug breakdown.

Liver microsomes, however, will not work to break down drugs without help. Oxygen and reduced TPN (triphosphopyridine nucleotide), an "enzyme helper" present in various kinds of chemical systems in nature, are also necessary common denominators. With the use of all three, microsomes, oxygen, and reduced TPN, many drugs are now being made to undergo in the test tube the same kind of metabolic disintegration as they would undergo naturally in the body.

In the course of evolution, however, it is obvious that the microsomal enzyme system did not arise in the body as a way of limiting the duration of action of medicinal compounds. It is present in many animal species that have never been exposed to drugs.

It has been suggested that the microsomal enzyme systems developed in the liver of an ancestral species as a way of disposing of useless or harmful substances taken into the body with food. Hundreds of compounds of no value to the body are swallowed with food and absorbed into the blood. Many more are made by the bacteria of the digestive tract. A separate mechanism, such as that of the liver microsomes, which functions to rid the body of such useless accumulations would be of great survival value. — U.S. Department of Health, Education and Welfare

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Camels hardly ever sweat at all, even in extreme heat. This "stinginess" with body moisture enables them to go for months without a drink. In an experiment one camel subsisted for 17 days on nothing but hay and dried dates out in the scorching sun. But when a camel does drink, it can tank up in a hurry. One moisture-starved animal downed 30 gallons within ten minutes.

* * *

Unless you make regular deposits in the Bank of Goodwill, your demands may come back marked "Insufficient Funds."

The greatest enemies of good mental health are fear and an inability to deal with problems, which if not faced and dealt with eventually give rise to mental and emotional disorders. Developing the following patterns of everyday behavior will help to sustain good and to improve poor mental health:

1. A sense of humor.
2. A habit of living in the present.
3. Freedom from worry, an ability to relax and to minimize strains and tensions that are unavoidable.
4. A sense of perspective, recognition of what is important and what is not — be disturbed about a situation *only* when something can be done about it and action is warranted.
5. A sense of purpose, of meaning in life, a set of goals.
6. Hobbies and interests outside of work — an absorbing interest in something you would rather do than eat.
7. An open-minded approach to difficulties, a willingness to experiment.
8. A habit of making prompt decisions and accepting the consequences. Delay causes strains and tensions since it involves living through an experience three times — (a) apprehension about making the decision; (b) living through the experience; (c) looking back with regret.
9. An ability to face reality.

Two Rapid-Stop Blackeyes

One of the shortest — and most daring — of medical exeriments recently took place on the flat sands of New Mexico in the U.S.A. A rocket-driven sled, mounted on rails, roared to a speed of over 630 miles per hour within a few seconds after take-off — then, in less than 2 seconds, braked to a shattering stop. In the sled, tied to a seat with nylon straps, was Colonel John F. Stapp of the U.S. Air Force. The colonel, an expert on aviation medicine, volunteered for the test designed to duplicate the windblast and other physical forces which buffet pilots attempting to bail out from supersonic jet aircraft.

Though exposed to a deceleration 35 times the force of gravity, and a wind pressure of more than two tons, Colonel Stapp suffered only minor ill effects from his supersonic voyage; two black eyes as a result of pressure on the eyelids during the incredibly rapid stop, and a small skin blister from dust particles in the air.

— ISPS

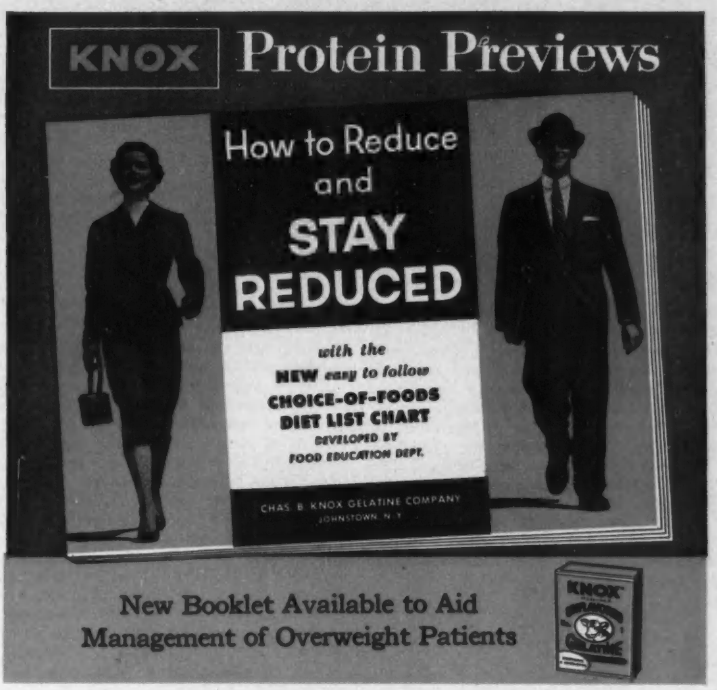
Ontario

The following are staff changes in the Ontario Public Health Nursing Services:

Appointments — *Verna Bates,* formerly with Fort William and District Health Unit to Toronto Dept. of Public Health; *Kathleen Nelson* (Health Visitor and Queen's Institute of District Nursing) to York County H.U.; *Christina Whitford* (Health Vis. and Queen's I. of D.N.) to Toronto D.P.H.

Resignations — *Muriel (Hansen) Hughes* from Scarborough Township Board of Health; *Amy Keown* from Brant Co. H.U.; *Jean (Hawkins) Love* from Kingston B. of H.; *Lydia (Henry) Scharrer* from Elgin-St. Thomas H.U.

Take time to work — it is the price of success;
Take time to think — it is the source of power;
Take time to play — it is the secret of perpetual youth;
Take time to laugh — it is the music of the soul;
Take time to give — it is too short a day to be selfish;
Take time to save — it is the foundation of your future;
Take time to read — it is the foundation of wisdom;
Take time to worship — it is the highway to reverence;
Take time to be friendly — it is the road to happiness;
Take time to dream — it is hitching your wagon to a star;
Take time to love and be loved — it is the privilege of the gods.



The 1955 edition of the well-known Knox "Eat-and-Reduce" booklet eliminates calorie counting for obese patients under your care. This year's edition is based on the use of Food Exchange Lists[1] which have proved so accurate in the dietary management of diabetics.

The first 18 pages of the new booklet present in simple terms key information on the use of Food Exchanges (referred to in the book as Choices). In the center, double gatefold pages outline color-coded diets of 1200, 1600, and 1800 calories based on the Food Exchanges.

To help patients persevere in their reducing plans, the last 14 pages of the new Knox booklet are devoted to more than six dozen, *tested*, low-calorie recipes. Use the coupon below to obtain copies of the new "Eat-and-Reduce" booklet.

1. Developed by the U.S. Public Health Service assisted by committees of The American Diabetes Association, Inc. and The American Dietetic Association.

Knox Gelatine Limited
Johnstown, N. Y., Dept. CD-7
Please send me ____ copies of the new illustrated Knox "Eat-and-Reduce" booklet based on Food Exchanges.
YOUR NAME AND ADDRESS

If you would cure anger, do not feed it. Say to yourself: "I used to be angry every day; then every other day; now only every third or fourth day." When you reach thirty days offer a sacrifice of thanksgiving to the gods.

— EPICTETUS, 60, A.D.

We should remember when dealing with the handicapped child that it is the ability — not the disability — that counts.

* * *

He had a good job, but his wife complained because his average income was about midnight.

News Notes

ALBERTA

DISTRICT 2

CAMROSE

Election of officers of the chapter recently resulted as follows: President, Sr. M. Geralda; vice-president, Mrs. L. Forrester; secretary-treasurer, Mrs. R. Andress. Mmes J. Danforth and Byers are committee conveners. Twenty-one members were present. Delegates to the convention in Calgary were chosen. Films on glaucoma and juvenile delinquency were shown. Dr. McIver was guest speaker at a later meeting and spoke on the fluoridation of drinking water. Twenty-four members were present and plans were made for a Jubilee smorgasbord.

DISTRICT 3

CALGARY

E. Shaw, president, conducted a recent meeting of the district attended by 40 members. Miss Street was one of the speakers during the discussion of the proposed revision of the A.A.R.N. Act. A $100 bursary will be awarded to a deserving candidate for nurses' training in each of the two training schools.

BANFF

Twenty-three members attended a recent meeting of the chapter. Mmes G. Barker and C. Langridge were made delegates to the convention in Calgary. Mrs. Brey reported 49 families in attendance at the clinic. Mrs. Worth reported that the film series in the children's ward of the hospital were successful and it was decided to proceed with the furnishings of the ward. The funds raised by the cancer workshop is used for cancer education and research. It was unanimously decided to support the council in its drive for compulsory registration of nurses.

HIGH RIVER

Mrs. Eaton presided at a meeting of the chapter recently and 17 members attended. Reports of the Hospital Day tea committee were heard.

DISTRICT 4

MEDICINE HAT

Forty-nine members attended the recent dinner meeting of the district. Special guests were ten members of the graduating class and the speaker for the evening, Rev. H. Meadows and Mrs. Meadows. Mr. Meadows spoke on his work among the Indians in Northern Manitoba. Three members and a student nurse were chosen to represent the district on the Golden Jubilee committee. Mrs. C. R. McKay conducted a later meeting when 26 members were present and B. Hlohovsky represented the student nurses' association. The registry report showed 27 calls received with six unfilled. Misses Hlohovsky, Ireland, Mmes McKay, Dederer, and Wall reported on the convention in Calgary. Miss E. Bietsch, provincial president, spoke briefly on the rural nurse affiliation program.

DISTRICT 7

EDMONTON

At a recent meeting of the district Misses Penhale and Johnson led a discussion on the revision of the provincial by-laws. There were 24 members present.

JASPER

The regular meeting of the chapter recently took the form of a bridge party and was attended by 22 members. Proceeds were used for the registration fee of the delegates to the provincial convention. A brief business meeting followed.

WAINWRIGHT

Officers elected at the annual meeting of the chapter were: President, Mrs. H. Stanton; vice-president, Mrs. J. Wallace; secretary-treasurer, I. Fletcher. Average attendance during the year was 16. Delegates were sent to all the conventions and as-

The Floor Supervisor

Call lights flashing, medications to be given, rounds to be made—this is no time to talk to a detail man! But knowledge of the drugs you handle is important. So . . . when you get a chance, talk with the Lederle Representative. He can give you much helpful information on regularly used products like:

ACHROMYCIN* Tetracycline, the leading tetracycline, today's foremost broad-spectrum antibiotic.

FOLBESYN* Vitamins, high potency parenteral B-complex with C.

DIAMOX* Acetazoleamide, a carbonic anhydrase inhibitor, the outstanding drug of its kind, useful in edema, glaucoma, epilepsy.

VARIDASE* Streptokinase-Streptodornase, used for enzymatic debridement and control of inflammation.

Ask your pharmacist to let you know when the Lederle man is in the hospital. (Maybe you'd like to schedule him to speak at your next supervisors' meeting!)

*REG. TRADE-MARK

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Mount Royal, Montreal, Quebec

MEDICAL REPRESENTATIVE

sistance was given at the Blood Donor clinic and the canvassing for the cancer campaign.

District 8

Claresholm

Mrs. Steele reported on the convention in Calgary at a recent meeting of the chapter. Films on care of the three types of polio sent by Miss Barker from Calgary were shown. A banquet was planned for the last meeting of the season in June.

BRITISH COLUMBIA

Abbotsford

Average attendance at chapter meetings during the year was 22. Guest speakers were: Mrs. Asche, speaking on tuberculosis; L. Langdale, on his work as probation officer for the Upper Fraser Valley; Dr. I. Fast, on the diagnosis of abdominal conditions. Interesting films were shown. Donations were made to: The cancer campaign; C.N.I.B.; C.A.R.S. and Community Aid. A $100 bursary was awarded to a local girl who is entering training. Members made tours of the rehabilitation centre of the Cerebral Palsy Association and the Crease clinic. Home nursing classes were provided for residents of the district. A Tupper Wear party, card party and a rummage sale were fund-raising projects. New officers are: President, Mrs. C. Lillies; vice-president, Mrs. F. Scott; secretary, Mrs. J. Irvine; treasurer, M. Mueller.

Chilliwack

At a recent meeting of the chapter Dr. C. Law of the Coqualeetza staff was guest speaker. The topic was tuberculosis surgery illustrated by colored slides. Mrs. C. Pennock outlined the nursing care. M. McKinlay thanked the speakers. The business meeting was chaired by Mrs. A. Edmeston. Two bursaries of $100 each were presented to prospective nursing students. A radio drama of the life of Florence Nightingale was sponsored. Flowers were placed on the altar in memory of the late E. Chadsey, M. Swanson, and Mrs. M. Rowberry at the service commemorating Miss Nightingale's birthday. Members dressed a local store window emphasizing the role of nursing in the prevention and treatment of polio. V. Day and B. Beck were chapter delegates to the provincial convention in Penticton.

TRAIL

Thirty-five members attended a recent meeting of the chapter conducted by the president, Mrs. Ross. A letter of thanks from Nelson Chapter for the annual dinner was read. Plans were made for a tea and to have Dr. McCreary speak at a subsequent meeting when the district chapters will be invited to attend. Proceeds of the tea will be donated to the fund for hospital curtains. It was decided to approve the adoption of proposed amendments in the provincial constitution and by-laws. Miss Whittington reported that over 1,600 children had had polio vaccine. A dinner meeting, convened by Mmes Meyers and Garland, was planned for June. At the close of the meeting Miss Whittington showed a film, "Search," on cerebral palsy.

VANCOUVER

St. Paul's Hospital

Mr. A. L. McLellan was scheduled to be guest speaker at the May meeting of the alumnae association on the topic of the growth and development of the Medical Services' Association. Mrs. G. Collishaw, acting president, was made official delegate to the provincial convention in Penticton. R. Smith plans to take a nursing degree at McGill School for Graduate Nurses. P. Horne is in Lima, Peru.

MANITOBA

DISTRICT 2

BRANDON

Mrs. M. Hannah, president, opened the district annual meeting and welcomed the members of Brandon Mental Hospital who participated in a symposium on mental nursing. P. Beecher outlined the courses available in psychiatric nursing; I. Zylich, nursing instructor, discussed the nurses' role; Mrs. J. Hannah, superintendent of nurses, spoke on nursing service. Other speakers were: Miss Smith, occupational therapist, on handicrafts and activities; Mr. L. Henderson, statistician and research analyst, on results of treatment by surgery and medicine, including the use of the drug, Largactil; Miss Kendall, on the benefits derived from her post-graduate course. Dr. Tyndell, recently from Vienna, asked all nurses to assist in directing patients to mental health clinics and later helping them in rehabilitation. A vote of appreciation for the excellent presentation of the symposium was moved by the secretary.

At the business meeting attended by 18 members that followed, the resignation of first vice-president, M. McPherson, was accepted with regret. The present slate of officers was voted to continue for another year. Problems to be presented at the annual provincial meeting in May and plans for the C.N.A. Biennial in Winnipeg in

1956 were discussed. It was announced that the by-laws had been accepted and are to be submitted to the Lieutenant Governor in Council. The joint Hospital and Nursing conference will be held October 18-20. At the annual dinner of the Graduate Nurses' Association, the president conveyed the greetings of the district to the graduating classes of Brandon General and Mental Hospitals. The next meeting will be held in October.

Winnipeg

General Hospital

One of the special functions in the celebration of the Golden Jubilee of the hospital was the dinner and dance, in honor of the 67th graduating class, at the Fort Garry Hotel. Seventy-eight nurses received their diplomas and special guests included six graduates of 1890-1905, among them Mrs. McKee from the West coast and Mrs. Graham of Winnipeg who is over ninety. Nineteen members attended the 1925 class reunion and 20 members attended the 25th anniversary of the 1930 class. Miss Cameron, director of nursing, drew attention to another milestone, the graduation of the 3,000th nurse. Dr. H. Saunderson, president of the University of Manitoba, as guest speaker, chose the topic, "What of the Next Fifty Years?" The alumnae association awarded $100 and a gold medal to the graduate with the highest grades in bedside nursing while the Vancouver Chapter donated $50 for the highest mark in obstetrical nursing.

Misericordia Hospital

Dr. A. Gordon was master of ceremonies and Dr. J. Farr addressed the 16 graduates at the recent graduation exercises. Sr. St. Odilon, director of nurses, administered the Florence Nightingale pledge and Rev. H. Daly presented the diplomas. B. Linklater presented awards to the following: M. Ostrowski, M. Herman, O. Rozwood, L. Cymbalisty, J. Wood. A $500 scholarship for post-graduate study was presented to D. Balcaen by Mrs. C. Cruden, president of the alumnae association. L. Lesperance won *The Canadian Nurse* award. The undergraduates entertained the graduating class prior to the exercises and the alumnae association held a banquet and dance in their honor.

NEW BRUNSWICK

MONCTON

Nurses' Hospital Aid

Mrs. G. Shaw, president, conducted recent meetings of the Aid. Mrs. M. Perry was made convener of the graduation dinner and dance and Mrs. L. Moore, representative to the Moncton Council of Women. Mrs. C. Johnson, a new member, was welcomed. Mrs. S. Dunham won the mystery box. Mrs. Shaw presided at the graduation dinner for a class of 23 members, including three from the school of radiologic technology, and welcomed the guests. Miss K. Richardson, superintendent of nurses, gave the invocation while Miss A. MacMaster, FACHA, former superintendent of nurses, addressed the class and proposed the toast. C. Clark responded. Student nurse C. Earley, accompanied by Miss Clark, was guest soloist. Other special guests were: Dr. and Mrs. C. Ibbotson, Mr. and Mrs. L. Lockton, and Mrs. H. Radcliffe. Three hundred guests attended and a dance and singsong followed.

NOVA SCOTIA

HALIFAX

Victoria General Hospital

The president of the alumnae association, Mrs. H. S. T. Williams, presided at the annual meeting. Average attendance during the year was 46. Miss F. MacDonald, director of nurses, was made honorary president. Special speakers at meetings included: M. Graham who spoke on her work with WHO; P. MacDonald, social worker, on her work at the hospital; Dr. J. Stapleton, radiologist, on Australia, his former home. Donations were made to: Red Feather campaign, March of Dimes, Cancer Society, Salvation Army, and the students' Year Book fund. Christmas and Easter boxes were sent out. The year's copies of *The Canadian Nurse* were bound for the residence library. Senior students held a pantry sale to raise funds for their year book. Plans for 1955 include: Award to the graduate obtaining the highest marks in surgery; a $100 bursary held in reserve for a post-graduate course for graduates; appointment of a representative and two student nurses to the provincial convention in New Glasgow; a course for members in public speaking and parliamentary procedure.

New officers are: President, L. Hitz; vice-presidents, G. Flick, Mrs. E. Blain; secretary, Mrs. F. MacLeod; treasurer, Mrs. L. Bell. Others assisting in various capacities are: P. MacIsaac, M. Ripley, E. Haliburton, C. MacLean, Mmes J. Cameron, V. Gormley, G. Freeman, L. MacRae, C. Hodgeson, H. S. T. Williams.

ONTARIO

DISTRICT 2

BRANTFORD

At the annual meeting of the district, H. Naudett became chairman replacing Mrs. M. Read who has moved from the district. M. Snider is past chairman while M. Thompson becomes first vice-chairman. S. Leadbetter resigned as secretary and the treasurer, M. Haviland, will be secretary-treasurer. There were 110 members registered. J. Wilcox, a victim of cerebral palsy herself, gave an inspiring talk on the disease and presented the film, "A Place in the Sun." The after-dinner speaker was Dr. W. L. C. McGill who gave a resumé of recent advances in surgery accompanied by

slides. It was noted that a good goodly percentage of those present subscribes to *The Canadian Nurse.*

District 5

Toronto

Women's College Hospital

Members of the 1955 class attended a recent meeting of the alumnae association. Miss R. Ford of the public relations department of the T. Eaton Co. Ltd., spoke on "It's a Woman's World," followed by slides on the latest fashion trends. Plans were made for a tour of the new residence. The dinner and dance for the graduating class, convened by D. Gordon, was a great success. S. Houston was made vice-president. A group of patients has established a Marion Hilliard Fund. Proceeds will be used medically and bear her name. Presentation to Dr. Hilliard will be made on January Nite, 1956. Address contributions to Mrs. W. J. Rapson, 19 Lower Linds Rd., Willowdale, Ont.

Ottawa

Civic Hospital

Mrs. J. Aylen is the first woman to be appointed chairman to the Board of Trustees of the hospital. Mr. D. R. Peart has assumed his duties as superintendent. Mrs. M. Keddie is a member of the Renfrew Hospital board. M. (Hollingworth) Holm is instructor of nurses at New Waterford General Hospital. E. Tingley, J. Douglas, and S. Black are attending University of Toronto while Y. Laroque is majoring in public health at Queen's. L. Schieman is doing physiotherapy work at a Costa Rican hospital while B. McLean is nursing in California and R. Belter in Moncton, N.B. M. Smith is on the staff at Westminster Hospital, London, and G. Ralph with T.C.A. in Montreal. P. Brown is with the C.P. Mission, Alirajpur, India.

On behalf of the alumnae association, Miss E. Horsey presented a Hammond electric organ at the opening of the new educational building for use in the chapel. The governor-general, Rt. Hon. Vincent Massey was principal speaker. Others included the Hon. Paul Martin, minister of health and welfare, Mayor C. Whitton and Miss E. Young, director of nursing and nurse education.

The alumnae association is 25 years old and it is noted that of the 1,623 graduates of the school of nursing, 387 are alumnae members. Officers elected at the annual meeting are: Honorary president, E. Young; president, D. Ainger; past president, V. Adair; vice-presidents, J. Milligan, B. Campbell; secretaries, J. Perrin, Mrs. W. Davidson; treasurer, Mrs. A. Thomson.

Serving in other capacities are: M. Lamb, W. Gemmell, E. Poitras, A. Dickinson, Mmes G. Gibson, T. Moffatt, M. Arbuckle, V. Heney, J. Argue, R. Lake.

Lady Stanley Institute

The annual meeting of the alumnae association was well attended. Officers elected are: Honorary president, Mrs. W. Lyman; honorary vice-presidents, M. Stewart, E. Young; president, Mrs. G. Skuce; vice-presidents, Mmes C. Port, H. Ellard; secretary, Mrs. M. E. Jones; treasurer, M. Scott. Others assisting include: D. Booth, C. Pridmore, Mmes W. Fraser, Jones, G. Bennett, J. Waddell. E. Johnston is the representative to *The Canadian Nurse.*

District 11

Alliston

Thirty-six members attended the last of the spring meetings. Students from the graduating classes of General and Marine Hospital, Collingwood, and Royal Victoria Hospital, Barrie, were present. A member of each class participated in the panel discussion on the recent provincial convention in Toronto. Other meetings of the chapter were: The annual meeting and dinner; one in Barrie with the guest speaker, Ina Dickie, relating experiences while with WHO in Thailand; the third, in Collingwood, with Dr. Storey speaking on new drugs in medicine. Interest in the two-year old chapter was noted. The attendance average is 40. The annual dinner on September 19 will open the fall program.

QUEBEC

Montreal

Royal Victoria Hospital

Officers elected at the annual meeting of the alumnae association are: President, G. Purcell; vice-president, M. (MacNichol) Butler; secretary-treasurer, L .Fetherstonhaugh; recording seceretary, L. (Rosevear) Denman.

Guest speaker at the annual alumnae dinner in honor of the graduating class, was Miss C. V. Barrett, supervisor of Montreal Maternity Hospital, R.V.H., who reviewed the development of that hospital, 1843-1955. G. Yeats thanked the speaker. At the graduating exercises, 103 members of the class received their diplomas from Miss Barrett and Dr. E. Smith presented awards to the following: I. Russell, P. Walker, B. Fraser, C. Walkem, A. Stewart, S. Holmes, D. Clark, F. Dawson, S. Messenger, W. Cairns. Mrs. S. Dawes presented the Women's Auxiliary bursary to G. Purcell. N. Patten won *The Canadian Nurse* award. Dr. W. G. Penfield, director of the Montreal Neurological Institute, was guest speaker. A parent and daughter tea concluded the graduation activities.

A reunion of Class '30 during graduation week was attended by 39 members. F. Gass, E. Hennigar, E. (Hamilton) Dawson, E. McLennan attended a recent meeting of Halifax Chapter.

B. (Inwood) Klatz, Montefiore Hospital, Bronx, N.Y., is going to England. B. Evans is on the staff of the Mayo General Hospital, Mayo, N.Y. P. Butterill visited R.V.H. recently.

Positions Vacant

ADVERTISING RATES — *$5.00 for 3 lines or less; $1.00 for each additional line.*
U.S.A. & Foreign — *$7.50 for 3 lines or less; $1.50 for each additional line.*

Closing date for copy: 20th of the month preceding the month of publication. All letters should be addressed to: The Canadian Nurse, 1522 Sherbrooke St. W., Montreal 25, Que.

Director of Nursing for General Hospital of Port Arthur. Applications are being received for this position. Hospital capacity — 275 beds, 26 bassinettes. Duties include overall supervision of nursing & nursing education. School of Nursing — 53 students. Address applications to Administrator, General Hospital of Port Arthur, Port Arthur, Ont., stating qualifications, experience & salary requirements.

Superintendent of Nurses for 22-bed Hospital. Good salary depending upon experience; increments every 6 mo. for 2½ yrs. Living accommodation in separate nurses' residence equipped with automatic heating & hot water supply. 1 mo. vacation after 1 yr. employment; statutory holidays & cumulative sick leave. Hospital well equipped & constitutes a staff of 4 registered nurses, 4 aides, combined x-ray & laboratory technician, cook, assistant cook, housekeeper & caretaker. No business matters to handle such as: bookkeeping, purchasing, admissions, etc. Apply in writing or phone Sec.-Manager or Supt. of Nurses, Union Hospital, Hafford, Sask.

Matron for 25-bed hospital, duties to commence at once. Apply, stating experience & salary expected, Sec.-Treas., Municipal Hospital, Three Hills, Alta.

Assistant Superintendent for active 60-bed General Hospital in town with population of approx. 4,000, 25 miles from London. Good working conditions & personnel policies; all graduate staff. Apply stating qualifications Supt., General Hospital, Strathroy, Ont.

Supervisor of Nursing for 28-bed general hospital in Huntingdon County, in a small industrial town 45 miles from Montreal, offering many pleasant social and recreational activities. Pleasant working conditions; living quarters in hospital; annual holiday of 1 mo.; statutory holidays; two wks. sick leave; Blue Cross paid. No previous Supervisor has ever left us due to dissatisfaction with working conditions or salary. Losses mainly have been due to marriage. Good starting salary. Apply: F. G. McCrimmon, M.D., Medical Superintendent, Box 488, Huntingdon, P.Q.

Supervisor of Nursing for 26-bed General Hospital; new 50-bed hospital opening in Sept. Central B.C. community of 10,000. Good organizer, experience in O.R. & obstetrics. Private suite in modern residence. State qualifications, salary, age & references. Apply Administrator, General Hospital, Quesnel, B.C.

Head Instructor for Training School to teach Sciences. 86-bed hospital; 30 students. Complete maintenance provided in comfortable suite. Apply, stating qualifications & salary expected, A. J. Schmiedl, Sec.-Manager, General Hospital, Dauphin, Man

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Instructor in Sciences, including curriculum planning, **Clinical Instructor** in Medicine and **Clinical Instructor** in Surgery required for School of Nursing by August 1, 1955, in 177-bed hospital, affiliation arranged in T.B. nursing, Psychiatric Nursing and Pediatric Orthopedic affiliation. Maximum of 60 students. One class a year. Excellent personnel policies. For further particulars apply to Miss E. A. Bietsch, Director of Nursing, Medicine Hat General Hospital, Medicine Hat, Alberta.

REGISTERED NURSES

FOR

CLINICAL INSTRUCTOR, HEAD NURSE, GENERAL DUTY

44-hour week, annual increments, cumulative sick leave, statutory holidays. Vacation: 4 weeks for Instructor and Head Nurse; 3 weeks for General Duty.

NURSING ASSISTANTS

40 hour week, 2 weeks vacation, other benefits comparable to Registered Nurses.

HAMILTON GENERAL HOSPITALS

Barton Street Unit • Mount Hamilton Hospital • Nora-Frances Henderson Hospital

Communicate directly with the Superintendent of Nurses of the hospital in which interested.

ASSISTANT DIRECTOR, NURSING EDUCATION
SCHOOL OF NURSING, APPROXIMATELY 70 STUDENTS
1 CLASS PER YEAR

Affiliation — Pediatrics, Psychiatry and Tuberculosis

200-bed hospital in pleasant city, 33,000; 2 colleges

Good salary and personnel policies

Allowance for degree with experience

For further details apply to:

DIRECTOR OF NURSES, GENERAL HOSPITAL
GUELPH, ONTARIO.

Instructor to teach anatomy and physiology, microbiology first term, followed by surgical nursing lectures and clinical supervision on surgical wards. Starting salary: $255; $10 for 2 yrs. experience; $10 yearly increments; 1½ days sick leave, cumulative; 10 statutory holidays; 40-hr. wk; 1 class per yr. in September. Apply to: Director of Nurses, Royal Inland Hospital, Kamloops, B.C.

Instructor for Nursing Arts & Surgical Nursing, followed by Clinical Teaching. Good salary & personnel policies. Apply Director of Nurses, St. Joseph's Hospital, Chatham, Ontario.

Nursing Arts Instructor for School of Nursing with capacity 195 students attached to expanding hospital of 571 beds. B.S. Degree in Nursing Education preferred or at least 3 yrs. experience & working toward degree. Located in "all American City" of 120,000. in North Eastern Ohio with educational, industrial, recreational & agricultural primary interests. Salary commensurate with qualifications. Write Director of Nursing, Aultman Hospital, Canton, Ohio.

Science Instructor for School of Nursing of 200 Students in 755-bed Hospital: Duties to commence Sept. 1, 1955. Apply Director of Nursing, Royal Alexandra Hospital, Edmonton, Alberta.

Instructor in Nursing Arts, Instructor in Science, Clinical Instructor in Operating Room Technique, Clinical Instructor in Pediatrics. Modern 450-bed Hospital. Maximum of 90 Students — 1 class a yr. Excellent personnel policies. Apply Director of Nursing Education, Kitchener-Waterloo Hospital, Kitchener, Ont.

Instructor for Science & Nursing Arts teaching 90 students. One Class per yr. New Hospital. Good Personnel Policies. Salary dependent on qualifications & experience. Apply: Director of Nursing, Moncton Hospital, Moncton, N.B.

Assistant Science Instructor & Nursing Arts Instructor. (1) Class yearly (35) in Class. Attraction for week-ends is nearby Rocky Mountains, Waterton & Glacier National Parks. Apply St. Michael's School of Nursing, Lethbridge, Alta.

Obstetrical Administrative Supervisor for 570-bed General Hospital, 76-bed dept.; supervision birth rooms, post partum & nursery. Salary: $3,936-$4,920. Degree preferred; collegiate school of nursing; N.L.N. temporary accreditation. 40-hr. wk. 9 holidays; 15 days cumulative sick leave; 12 working day vacation. Annual increments, Social Security & retirement. Living accommodations available. Apply Miss Louree Pottinger, Medical College of Virginia, Richmond, Virginia.

Obstetrical Clinical Instructor for School of Nursing with capacity 195 students attached to expanding hospital of 571 beds. B.S. Degree in Nursing Education preferred or at least 3 yrs. experience & working towards degree. Located in "all American City" of 120,000. in North Eastern Ohio with educational, industrial, recreational & agricultural primary interests. Salary commensurate with qualifications. Write Director of Nursing, Aultman Hospital, Canton, Ohio.

Operating Room Supervisor. Salary commences $300 per mo.; **Graduate Nurses** for 100-bed West Coast General Hospital. Salary: $250 per mo. less $40 for board, residence, laundry. 3 annual increments; $10 per mo. night duty bonus. 1 mo. vacation with full salary after 1 yr. service. 1½ days sick leave per mo. cumulative to 36 days. Transportation allowance up to $60 refunded after 1st yr. Apply Director of Nursing, General Hospital, Prince Rupert, B.C.

CANADIAN RED CROSS SOCIETY

invites applications for STAFF and ADMINISTRATIVE positions in HOSPITAL, PUBLIC HEALTH NURSING SERVICES, and BLOOD TRANSFUSION SERVICE for various parts of Canada.

- The majority of opportunities are in OUTPOST SERVICES in British Columbia, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia.
- Commensurate salaries for experience and qualifications. Transportation arrangements under certain circumstances. Bursaries are available for post-graduate study.

For further particulars apply:

NATIONAL DIRECTOR, NURSING SERVICES, CANADIAN RED CROSS SOCIETY,
95 WELLESLEY ST., TORONTO 5, ONTARIO.

Operating Room Supervisor qualified by experience or Post-Graduate training to commence duty July or August in preparation for taking charge of Operating Room late in the Fall. For full particulars please apply Director of Nurses, Union Hospital, Swift Current, Saskatchewan.

Operating Room & Central Supply Supervisor on or before July 1 to take charge & be responsible for administration of both. 60-bed General Hospital in South Western Ontario approximately 23 miles from London with good bus or train service. Apply: Supt., General Hospital, Strathroy, Ont.

Operating Room Supervisor, experienced, preferably with p.g. course; also **Clinical Instructor for Surgical Nursing.** Salary dependent on qualifications and experience. New wing near completion. For further particulars apply: Director of Nursing, Union Hospital, Moose Jaw, Sask.

Operating Room Nurses, immediate appointments, for 511-bed newly enlarged and finely equipped hospital; 10 operating rooms now completed. Northeastern Ohio stable "All-American City" of 120,000. In centre of area of recreational, industrial and educational friendly activities; living cost reasonable. Within pleasant driving-distance advantages of metropolitan Cleveland and Columbus, Ohio, and Pittsburg, Pa. Friendly and considerate working associates and conditions. Progressively advanced personnel policies. Starting salary: $240 per mo. with 4 merit increases. Paid vacation, sick leave, recognized holidays, premium pay, sickness insurance and hospitalization program, retirement. Contact Director of Personnel, Aultman Hospital, Canton, Ohio, by letter or collect telephone 4-5673.

Operating Room Nurses and **General Duty Nurses** for new 150-bed hospital. Starting salary for Registered General Duty Nurses $230 with annual increases to $40. 1½ days per mo. cumulative sick leave; 40 hr. wk; 28 days vacation; 10 statutory holidays. Apply: Supt. of Nurses, Trail-Tadanac Hospital, Trail, B.C.

Operating Room & General Staff Nurses for 110-bed Hospital in Fraser Valley. Basic Salary: $230. per mo. 40-hr. wk. R.N.A.B.C. agreement in effect. Address applications or enquiries to General Hospital, Chilliwack, B.C.

Night Supervisor, Head Nurses & General Duty Nurses for 147-bed Medical & Surgical Sanatorium. Salary dependent upon experience & qualifications. Residence accommodation if desired; transportation arrangements for those living out. 1 mo. vacation annually, sick benefits, etc. Time allowed for university study. For full particulars apply Director of Nursing, Grace Dart Hospital, 6085 Sherbrooke St. E., Montreal 5, Quebec.

Night Supervisor & General Duty Nurses for new 100-bed General Hospital. Salary dependent on qualifications & experience. 3-wks. annual vacation; sick benefits, etc. Apply Administrator, Dufferin Area Hospital, Orangeville, Ont.

Head Nurse with University Certificate & previous experience preferred for 44-bed Medical Unit. **Clinical Instructor in Obstetrical Nursing (1),** duties to include assisting the head nurse in 26-bed unit. Apply Director of Nursing, General Hospital, Oshawa, Ontario.

REGISTERED NURSES

FOR

General Duty and Operating Room

Opportunities available at the new

MONTREAL GENERAL HOSPITAL

For full particulars write to:

DIRECTOR OF NURSING, 1650 CEDAR AVENUE, MONTREAL 25, QUE.

Nurses for Obstetrical, Surgical & Operating Room Services in new 200-bed General Hospital. Starting Salary: $260 per mo., 40-hr. wk., good personnel policies. Limited number of accommodations for living in. Apply Director of Nursing Service, St. Charles Hospital, Toledo 5, Ohio.

Operating Room Nurses & General Duty Nurses immediately. Apply Dirdector of Nursing Service, St. Joseph's Hospital, Bellingham, Washington.

Obstetrical Nursing Staff needed. (1) Assistant Supervisor of Obstetrical Ward. (1) Delivery Room Nurse. Good personnel policies; 44-hr. wk. Post-graduate preparation with experience preferred. Apply Director of Nurses, Public General Hospital, Chatham, Ont.

Operating Room Nurse (1) & Floor Duty Nurses for 50-bed General Hospital. Apply Supt., Leamington District Memorial Hospital, Leamington, Ontario.

Graduate Nurses, Evening Supervisor, Night Supervisor for modern 44-bed Hospital in southern Ontario. 44-hr. wk.; rotating shifts; 8 statutory holidays; 3-wks. annual holiday. New residence under construction. Apply Supt., Haldimand War Memorial Hospital, Dunnville, Ontario.

District Supervisor for City of Ottawa Health Dept., preferably with certificate in administration & supervision in Public Health Nursing. Generalized program under director of Public Health Nursing. Good Personnel Policies, Blue Cross & pension plan available. For further details apply Employment & Labour Office, Treasury Dept., Transportation Bldg., 48 Rideau St., Ottawa 2, Ontario.

Public Health Nurse Grade 1. British Columbia Civil Service, Dept. of Health & Welfare. Starting Salary $255. $260. $266. per mo., depending on experience, rising to $298. per mo. Promotional opportunities available. Qualifications: Candidate must be eligible for registration in British Columbia & have completed a University degree or Certificate course in Public Health Nursing. (Successful candidates may be required to serve in any part of the Province.) Cars are provided. 5-day wk. in most districts. Uniform allowance. Candidates must be British subjects; preference is given to ex-service women. Application forms obtainable from all Government Agencies; the Civil Service Commission, 544 Michigan St., Victoria, or 411 Dunsmuir St., Vancouver 3, to be completed & returned to the Chairman, Civil Service Commission, Victoria. Further information may be obtained from the Director, Public Health Nursing, Dept. of Health & Welfare, Parliament Bldgs., Victoria, B.C.

Public Health Nurses (2) for August 1, for generalized program in rural area. Salary commensurate with experience. Liberal car allowance. Preference given to one with secondary school experience. Apply Muskoka District Health Unit, Bracebridge, Ont.

Public Health Nurses (qualified) for generalized public health nursing city service & (1) for secondary school program. Basic salary $2,900 for C.P.H.N. & $3,000. for B.Sc. N., adjusted according to experience on starting. Annual increment $150. Shared pension, medical care & hospitalization plans. Sick leave accumulative. 1 mo. vacation. Transportation provided or car allowance. Apply: Medical Officer of Health, Peterborough, Ontario.

Public Health Nurses for Dept. of Health, City of Kingston. Salary range in effect. 5-day wk. Pension & hospitalization plans available. Apply Medical Officer of Health, City Hall, Kingston, Ont.

REGISTERED NURSES

$2,430 per annum $3,120

According to Qualifications

for the

Department of Veterans' Affairs Hospitals

SUNNYBROOK HOSPITAL, TORONTO

and

WESTMINSTER HOSPITAL, LONDON

Application forms, available at your nearest Civil Service Commission Office, National Employment Service & Post Office, should be forwarded to the Civil Service Commission, 25 St. Clair Ave., E., Toronto 7, Ontario.

Public Health Nurses (8) in North York Township (adjacent to Toronto.) Generalized program; 35 hr. wk.; 4 wks. vacation with salary; cumulative sick leave. Free hospitalization insurance; pension plan; group life insurance. Small suburban districts available. Salary schedule in effect with 4 annual increments & car allowance of $60 per mo. Address inquiries to Dr. Carl E. Hill, M.O.H., 5248 Yonge St., Willowdale, Ont. Personal interviews should be arranged. Staff appointments become effective Aug. 1 or Sept. 1.

Public Health Nurse. Township of Michipicoten, 160 miles north of Sault Ste. Marie. $3,000. per yr. with 1 mo. vacation annually. 5-day wk. Annual salary increase. Blue Cross Medical Coverage. Sick leave. Transportation provided. Program of general public health nursing in community of 3,000. people. Apply Dr. F. G. Pearson, M.O.H., Township of Michipicoten, Jamestown, Ont.

Public Health Nurses qualified for generalized program. Salary: $2,700-3,200 depending on experience. Annual increment $100. 5-day wk.; pension plan, Blue Cross & P.S.I. available. Car provided or car allowance. Apply Dr. Charlotte M. Horner, Director, Northumberland-Durham Health Unit, Cobourg, Ont.

Qualified Public Health Nurses for Generalized Public Health Nursing Service for City of Toronto, Dept. of Public Health. Salary Range: $3,186-3,618. Starting Salary based on experience. Annual Increments; 5-day wk. Vacation, Sick Pay & Pension Plan Benefits. Apply Personnel Dept. Room 320, City Hall, Toronto, Ontario.

Public Health Nurses, bilingual, required by Prescott & Russell Health Unit. Minimum Salary: $2,600. with allowance for previous experience & annual increments. Car provided or allowance for own car. 5-day wk.; Blue Cross & sick leave. Apply to Dr. R. G. Grenon, Director, Prescott & Russell Health Unit, Hawkesbury, Ont.

Public Health Nurse for York Township. Minimum salary: $2,800. with annual increment. Accumulative sick leave, 5-day wk., pension plan. Generalized program. Apply Dr. W. E. Henry, Medical Officer of Health, 2700 Eglinton Ave., W., Toronto 9, Ont.

Public Health Nurses required for Generalized Program in Seaway Development Area. Minimum Salary: $2,700. with allowance for experience. Group Insurance & Blue Cross available. Apply R. S. Peat, M.D., Medical Officer of Health, S.D. & G. Health Unit, 104 2nd St., W., Cornwall, Ont.

McKELLAR GENERAL HOSPITAL, FORT WILLIAM, ONT.

Requires

A qualified staff for the following positions:

CLINICAL INSTRUCTOR IN SURGICAL NURSING

CLINICAL INSTRUCTOR IN OPERATING ROOM

NURSING ARTS INSTRUCTOR

Gross salary commensurate with experience, 28 days vacation after one year, 8 statutory holidays, sick leave accumulative to 60 days; Residence accommodation available at reasonable rates. Hospital has recently completed a well equipped and staffed wing with extensive renovation program progressing in the old section.

APPLY DIRECTOR OF NURSING

School of Nursing, Metropolitan General Hospital
WINDSOR, ONTARIO

The following positions combining both classroom and clinical instruction will be open August, 1955.

INSTRUCTOR IN PEDIATRIC NURSING
INSTRUCTOR IN SCIENCE AND SURGICAL NURSING
INSTRUCTOR IN HEALTH AND MEDICAL-SURGICAL NURSING

This is a new school of nursing with a curriculum pattern of two years of nursing education followed by one year of guided nursing service. It offers an excellent opportunity for instructors to participate in the development of a sound educational program since the hospital does not depend on students for nursing service during their two educational years.

For further information apply to:

MISS DOROTHY R. COLQUHOUN, DIRECTOR, SCHOOL OF NURSING, 2240 KILDARE ROAD, WINDSOR, ONT.

Public Health Nurses for generalized program (bedside nursing included). Minimum salary: $2,700 with allowance for previous experience. Annual increments. Cumulative sick leave plan. Blue Cross available. Interest free loans for purchasing cars if necessary. Transportation allowance. 1 mo. holiday at the end of 1 yr. Apply Dr. J. I. Jeffs, M.D., D.P.H., Lennox & Addington County Health Unit, Memorial Bldg., Napanee, Ontario.

Public Health Nurse for well established generalized program in Grey County, population of town, 4,000. Minimum salary: $2,700; allowance made for experience; 4 wks. vacation. Apply to D. D. Brigham, Secretary, Board of Health, Hanover, Ont.

Public Health Nurses for a generalized program in a rural-suburban Health Unit near Toronto. Minimum salary $3,000. Pension plan. For full details apply Supervisor, Peel County Health Unit, Court House, Brampton, Ont.

Psychiatric Nurse to assume position as Head Nurse & Clinical Supervisor of new 38-bed Psychiatric Unit in a 500-bed General Hospital. An excellent opportunity for a Psychiatric Nurse who wishes to assume leadership in developing the policies, procedures & teaching program of this new Psychiatric Unit. Patients treated only by psychiatrists. The most modern facilities & treatment methods. Cooperative administration. Bachelor's Degree required plus Psychiatric experience. Salary commensurate with experience & abilities. Write Director of Nursing, Aultman Hospital, Canton, Ohio.

General Duty Nurses (2) for new 22-bed Hospital. Salary: $175. per mo. basic with $5.00 per mo. for each 6 mo. of experience to a maximum of $200. with full maintenance. Apply Miss Helen Deagle, Matron, Municipal Hospital No. 22, Consort, Alta.

General Duty Nurses (3) at once for 25-bed hospital; 2 hrs. from Calgary. 8-hr. shifts; 6 day wk., 1 mo. holiday with pay after 1 yr. service. $5.00 increments at 6 mo. & 1 yr. Fully modern. Alberta's Wheat Centre. Apply: Matron, Municipal Hospital, Three Hills, Alberta.

Registered Nurses (3) for 70-bed Municipal Hospital. New wing, modern. Three separate services — Medical, Surgical & Maternity. Salary: $180 per mo. plus full maintenance with $5.00 increase every 6 mo. service for four years. 44-hr. wk.; 3-8 hr. rotating shifts. 3 wks. holiday with pay after 1 yr. service. Statutory holidays. Apply Matron, Municipal Hospital, Box C 550, Taber, Alta.

General Duty Graduate Nurses for 70-bed acute General Hospital situated 200 miles northwest of Vancouver on the B.C. coast. Salary $222 per mo. plus four semi-annual increments, less $25 per mo. full maintenance; 4 wks. holidays plus 10 statutory holidays after 1 yr. Transportation advanced if desired. Apply: Matron, St. George's Hospital, Alert Bay, British Columbia.

General Duty Nurses for hospital 300 miles north of Vancouver, on the B.C. coast. Salary $215 per mo. less $40 maintenance; 2 annual increments of $5.00 per mo. Sick time 1½ days per mo. cumulative; 1 mo. annual holiday, plus 10 days in lieu of statutory holidays. Transportation to Bella Bella refunded after 1 yr. Apply: Matron, The R. W. Large Memorial Hospital of the United Church of Canada, Campbell Island P.O., Bella Bella, British Columbia.

Registered Nurses for new 30-bed hospital. R.N.A.B.C. policies in effect. Apply Matron Creston Valley Hospital, Creston, B.C.

ASSISTANT DIRECTOR OF NURSING

Required on or before July 15 for New 125-bed Hospital in Suburban Toronto.

Salary open depending on training and experience.

Enquiries treated in confidence.

Apply Administrator,

HUMBER MEMORIAL HOSPITAL, 200 CHURCH ST., WESTON, ONTARIO

Registered Nurses for General Duty Staff. Salary commences at £40-10-0 per mo. with full maintenance. Transportation allowance. For full particulars apply Matron, King Edward VII Memorial Hospital, Bermuda.

Graduate Nurses (2) for 22-bed hospital. Salary: $230 per mo., if B.C. registered; less $40 board, room, & laundry. 28 days vacation after 1 yr. on full pay. 1½ days sick leave per mo. cumulative. Apply, giving references, Matron, Burns Lake Hospital, Burns Lake, British Columbia.

Graduate Nurses for General Duty (3). One to commence duties as soon as possible & Two to commence duties about October 1, 1955. Salary: $220 per mo. less $35. for full maintenance. 40-hr. wk.; 28 days vacation after 1 yr. service & 10 statutory holidays per yr. Fare refunded after 1 yr. service. Only graduate nurses accepted. Apply The Matron, General Hospital, Golden, B.C.

Registered Nurses (2 or 3) for General Duty. 18-bed hospital in beautiful Windermere Valley, B.C. Separate nurses' residence, fully modern. Salary: $220 per mo. less $50 full maintenance. 28 days vacation after 1 yr. service: 2 wks. vacation at end of 6 mos. if desired. Satutory holidays & 18 days sick leave per yr. cumulative. 8-hr. alternating shifts; 40-hr. wk. Good swimming, fishing, hiking; near Radium Hot Springs; new modern theatre. Apply, stating age & when available, Mrs. D. Cookson, Matron, Lady Elizabeth Bruce Memorial Hospital, Invermere, B.C.

General Duty Nurses. Salary: $230-$270, $10.00 increment for experience. 40-hr. wk. 1½ days sick leave per mo. cumulative; 10 statutory holidays, (1) mo. vacation. Must be eligible for B.C. registration. Apply Director of Nurses, Royal Inland Hospital, Kamloops, B.C.

Inquiries invited from **Graduate Nurses for General Staff Duty.** 40-hr. wk. Salary: $235.50 per mo. as minimum and $273.75 as maximum, plus shift differential for evening and night duty. Temporary residence accommodation is available. Applications should be accompanied by letter of acceptance of registration in B.C. from Registrar of Nurses, 2524 Cypress St., Vancouver, B.C. Please apply to Personnel Department, Vancouver General Hospital, Vancouver, B.C.

Registered Nurses. 27-bed Hospital, expanding. Good personnel policies & salaries; nice community. Nurses who have not written Canadian Test Pool must write Wyoming State Board test. Apply Hot Springs County Memorial Hospital, Box 710, Thermopolis, Wyoming.

LEADING 300-BED HOSPITAL ON LAKESHORE

invites applications from

1. General Duty Nurses
2. Supervisors — Obstetrical (1)
   Pediatric (1)

Accommodation in new modern residence available. Liberal Personnel Policies. Fifty Dollars refunded on transportation after one year's service.

Apply to:

DIRECTOR OF NURSING, GENERAL HOSPITAL, PORT ARTHUR, ONTARIO

OPERATING ROOM SUPERVISOR

for

SAINT JOHN GENERAL HOSPITAL

SAINT JOHN, N.B.

400 BEDS

Good salary and personnel policies. Apply:

Director of Nurses, General Hospital, Saint John, N.B.

Graduate Nurses (2) for small Community Hospital in "Silvery Slocan" district of British Columbia. Salary: $230 per mo.; annual increments of $5.00 per mo. Board in hospital, $40. 40-hr. wk.; graduate complement 5. 28 days holidays after 1 yr. service. Customary sick leave, 1½ days per mo. Duties to commence in July. Apply giving full details, Sec., Slocan Community Hospital, New Denver, B.C.

General Duty Nurses for 430-bed hospital; 40-hr. wk. Statutory holidays. Salary: $235-268. Credit for past experience. Annual increments; cumulative sick leave; 28 days annual vacation; B.C. registration required. Apply Director of Nursing, Royal Columbian Hospital, New Westminster, B.C.

General Duty Nurses for 40-bed hospital. Salary: $250 per mo. less $45 full maintenance. 42-hr. wk. 28 days annual holiday plus 10 statutory holidays. Rotating shifts. Cumulative sick leave. Self-contained residence. Apply: Director of Nursing, General Hospital, Princeton, B.C.

Graduate Nurses (3) for 24-bed hospital. Salary: $230 per mo. if B.C. registered; less $40 board, lodging, laundry. 1 mo. vacation after 1 yr. on full pay. 1½ days sick leave per mo. cumulative. Apply, stating experience, Matron, Terrace & District Hospital, Terrace, British Columbia.

General Duty Nurses for Western Memorial Hospital. Gross salary: $2,100 - 2,300; 4 wks. vacation. Transportation from outside the Province paid, subject to 1 yr. service. Apply Supt. of Nurses, Western Memorial Hospital, Corner Brook, Newfoundland.

General Staff Nurses for 400-bed Medical & Surgical Sanatorium, fully approved student affiliation & post-graduate program. Full Maintenance. Recreational facilities. Vacation with pay. Sick benefits after 1 yr. Blue Cross coverage. Attractive salary; 40-hr. wk. For further particulars apply Supt. of Nurses, Nova Scotia Sanatorium, Kentville, N.S.

Registered Nurses (2) for General Duty at 30-bed hospital in Dryden, Northwestern Ontario. Fully modern nurses' residence. Salary: $160 per mo. plus full maintenance; subject to increase after 6 mo., with regular annual increases thereafter. 30 days vacation after 1 yr. service. Successful applicants reimbursed rail fare after 1 yr. Apply, stating age & when available, Supt., District General Hospital, Dryden, Ont.

Registered Nurses for General Duty. Initial salary: $200. per mo.; with 6 or more month's Psychiatric experience, $210. per mo. Salary increase at end of 1 yr. 44-hr wk; 8 statutory holidays, annual vacation with pay. Living accommodation if desired. For further information apply Supt. of Nurses, Homewood Sanitarium, Guelph, Ont.

General Duty Nurses for Modern 450-bed Hospital. Excellent personnel policies & working conditions. Apply Director of Nursing, Kitchener-Waterloo Hospital, Kitchener, Ontario.

General Duty Nurses for Medical, Surgical, Pediatrics, Obstetrics. Good salary & personnel policies. Apply Director of Nursing, Victoria Hospital, London, Ont.

General Duty Nurses for all departments. Gross salary: $200 per mo. if registered in Ontario with 1 yr. or more of experience; $190 with less than 1 yr. of experience & until registration has been established. $20 per mo. bonus for evening or night duty; annual increment of $10 per mo. for 3 yrs. 44-hr. wk., 8 statutory holidays, 21 days vacation & 14 days leave for illness with pay after 1 yr. of employment. Apply: Director of Nursing, General Hospital, Oshawa, Ont.

WOODSTOCK GENERAL HOSPITAL
WOODSTOCK, ONTARIO

REQUIRES

One Science Instructor — One Night Supervisor
Two Clinical Instructors (one qualified in Obstetrics)
Additional staff for our new Hospital.

Apply:

MISS PHYLLIS BLUETT
DIRECTOR OF NURSING

Graduate Nurses for modern 125-bed Community Hospital in suburban Toronto, opening new wing. Salary range: General Duty — $205 to 275 monthly, Head Nurse — $225 to 295. Supervisor — $260 to 310. Residence accommodation optional. Apply Director of Nursing, Humber Memorial Hospital, 200 Church St., Weston, Ont.

Registered Nurses & Maternity Nurses. Basic salary: $150 & $105 respectively, with additional increases. Blue Cross & many other benefits. Attractive nurses' residence, motel style. Additional help required for opening of new floor. Apply Supt., Barrie Memorial Hospital, Ormstown, Que.

Graduate Nurses for General Staff Duty in 350-bed Tuberculosis Hospital in Laurentian Mts. For further information, apply Director of Nursing, Royal Edward Laurentian Hospital, Ste. Agathe des Monts, Quebec.

Registered Nurses needed at once for new 60-bed Hospital in Sidney, Nebraska. All shifts. Beginning salary: $250. Apply immediately to Administrator, Frank Harris, Cheyenne County Memorial Hospital, Sidney, Nebraska.

Graduate Nurses for General Duty. Basic Salary $300. plus differentials. 118-bed Hospital along the shores of Lake Michigan, 25 miles from Chicago. Modern ranch style Nurse's homes. Good Personnel policies. Apply Highland Park Hospital Foundation, 718 Glenview Ave., Highland Park, Illinois.

Registered Staff Nurses, immediate appointments, in 511-bed newly enlarged and finely equipped general hospital. Duty assignments in medical, surgical, pediatrics, psychiatric, obstetrics, or contagion units. Northeastern Ohio stable "All-American City" of 120,000. In centre of area of recreational, industrial, and educational friendly activities. Living costs reasonable. Within pleasant driving-distance advantages of metropolitan Cleveland and Columbus, Ohio and Pittsburg, Pa. Friendly, cooperative work relations and conditions. Progressively advanced personnel policies. Starting salary: $240 per mo. with 4 merit increases. Paid vacation, sick leave, recognized holidays, premium pay, sickness insurance and hospitalization program, retirement. Contact: Director of Personnel, Aultman Hospital, Canton, Ohio, by letter or collect telephone 4-5673.

Graduate Nurses for new & modern "Hospital of Ideas." 300-bed Cancer Research Hospital located in the beautiful Texas Medical Center. Opportunity to learn advanced methods in Cancer Nursing. Excellent working conditions; good salary; liberal employee benefits plus the advantage of associating with a University Hospital. For further information on the most talked-about hospital in the largest city in the largest state in the United States, write to the Personnel Manager, The University of Texas, M.D. Anderson Hospital and Tumor Institute, Houston 25, Texas, U.S.A.

Registered Staff Nurses for 200-bed Teaching Children's Hospital located in Puget Sound in heart of Pacific Northwest. Starting Salary: $255 per mo. 40-hr. wk. Opportunity for study at nearby University of Washington. Write: Director of Nursing, Children's Orthopedic Hospital, 4800 Sand Point Way, Seattle 5, Washington.

Supt. of Nurses for modern 60-bed general hospital. Apply stating qualifications to Dr. M. R. Stalker, Hon. Medical Supt., Barrie Memorial Hospital, Ormstown, Que.

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DIRECTOR OF NURSES, GENERAL HOSPITAL, GUELPH, ONTARIO.

Hospital Supt. for modern, fully equipped 34-bed hospital. Located in a friendly town, 32 miles south of Ottawa. Duties to commence Aug. 1. Excellent meals, laundry processed, live out. Please furnish references stating age, qualifications, experience & salary expected. Apply Mr. F. Erle Helmer, The Winchester & District Memorial Hospital, Winchester, Ont.

Operating Room Supervisor for new 111-bed hospital to have charge of O.R.'s, Post Anes., Central Dressing Rooms & Emergency Dept. Post-graduate preferred. Minimum starting salary: $260. Credits for P.G. & experience. Apply Supt. of Nurses, West Coast General Hospital, Port Alberni, B.C.

Asst. Head Nurses for children's orthopedic hospital. Good personnel policies. Apply Director, Shriners Hospital for Crippled Children, Montreal, Que.

Graduate Registered Nurses for general duty. 375-bed industrial hospital, all graduate staff. Good salary with differential for evenings & nights; periodical raises. Good personnel policies, 40-hr. 5 day wk. 1 meal & laundry of uniforms free. $45 per mo. complete maintenance if desired. Apply Director of Nurses, Missouri Pacific Employes' Hospital, St. Louis 4, Missouri.

Registered Nurses for 35-bed Hospital. Salary $200 per mo. with complete maintenance in residence. Apply Supt., Little Long Lac Hospital, Geraldton, Ontario.

Nurse to direct Public Health Nursing Program for City Health Dept. Preference given to B.Sc. Nursing (Public Health) plus administrative & supervisory training & experience. 5-day wk.; sick leave & pension scheme; 1 mo. holiday after 1 yr. State salary expected. Apply Dr. W. H. Hill, City Health Dept., Calgary, Alberta.

Public Health Nurses to commence Sept. 1 for Health Dept. City of Calgary. Minimum salary $2,724 with allowance for experience. 5 day wk. Pension & hospitalization plans available. 1 mo. vacation after 1 yr. Apply Dr. W. H. Hill, Health Dept., Calgary, Alta.

A 6-mo Postgraduate Course in Plastic Surgery commences on Oct. 1 at St. Lawrence Hospital, Chepstow, Mon. England. 100 Plastic Surgery, 50 Orthopedic beds. Applications are invited from Canadian Trained Nurses. Posts afford an opportunity of gaining experience in Plastic Surgery methods & of seeing something of England. Successful candidates can be accepted a couple of months earlier if desired, to gain experience before course commences & see England in the summer. Salary £360 a yr., less £135 for board residence. Must pay own fare to England. Write stating age & 2 references to T. A. Jones, Group Sec., 64 Cardiff Rd., Newport. Mon., England.

Medical-Surgical Clinical Instructor. Student body of 55. 1 Class enrolled annually. Good personnel policies. For further information apply Director of Nursing, General Hospital, Belleville, Ont.

General Duty Nurses (2) as soon as possible. Salary $180 per mo. plus full maintenance, 3 increases of $5.00 per mo. for each yr. experience to a maximum of $195. 3 wks. vacation with pay plus all statutory holidays. Separate nurses' residence. Apply Matron, Municipal Hospital, Fairview, Alta.

Registered Nurses (2), immediately, for small hospitals held by Notre-Dame Sisters. Salary: $225. For further information apply Gabriel Hospital, Ponteix, Sask. or Notre-Dame Hospital, Val Marie, Sask.

Registered Nurses for 36-bed General Hospital. Basic salary: $230; increments $10. 40-hr. wk., full maintenance $45. R.N.A.B.C. agreement. Half fare refunded after 6 mo., balance after 1 yr. Apply Matron, Nicola Valley General Hospital, Merritt, B.C.

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